THE BUILDER

A JOURNAL FOR THE ARCHITECT AND FOR ALL INTERESTED IN THE CONSTRUCTIVE AND DECORATIVE ARTS.

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NOTTINGHAM MUNICIPAL BUILDINGS SCHEME.

WE referred in a recent issue to the proposal of the Nottingham Town Council to consider the question of building new Municipal Buildings at a cost of from £170,000 to £200,000, a proposition which was unanimously agreed to and to which abundant reference has been made in the local Press.

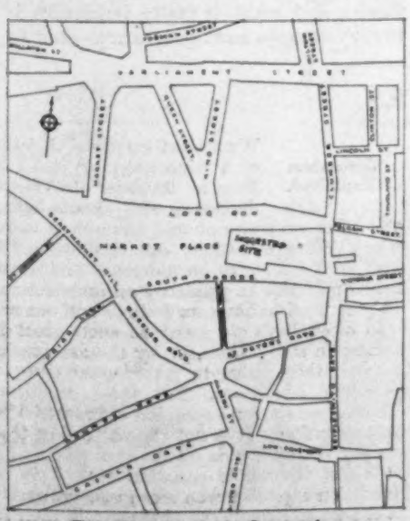
Four alternatives seem to us to be under discussion—the maintenance of the *status quo* on the plea that rates are high and local trade is bad; the proposition that the Guildhall, built some twenty years ago from designs of Mr. Verity, should be added to; the proposal that entirely new Municipal Buildings should be erected on a site fronting on the market-place; and, fourthly, that a suggestion of Mr. Sutton's, which we illustrate by a plan, should be adopted for carrying out certain necessary street improvements and extending the market-place by demolishing a block of old buildings and then erecting new Municipal Buildings in the centre of the enlarged open space so formed.

Economy in all matters is of two kinds—first, the economy of not spending where expense can be avoided; and, secondly, the wise expenditure of money by which increased revenue can be obtained. Economy of the former kind is very often short-sighted, since it involves no consideration of future needs or developments; while economy of the second type justifies itself by results.

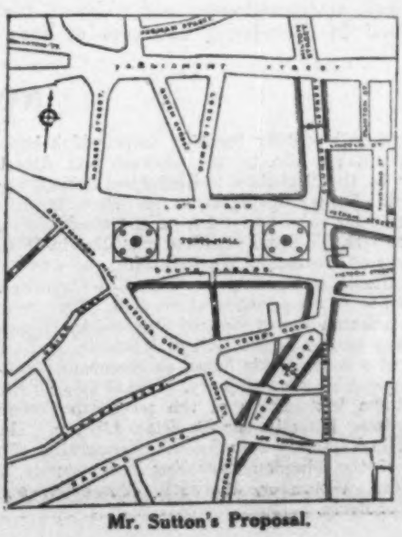
The great cities of this country have in many cases expended sums of money which would have resulted in giving them magnificent public buildings and wide and convenient streets if the authorities had, as in the case of many foreign towns, considered future developments and made provision for them step by step in accordance with a well-thought-out plan. The large amount of money spent on buildings and improvements on the Continent often surprises us; yet, just because this expenditure has been well considered in connection with a general plan, it has not been wasteful; while in England the tendency is to carry out something which will just meet present necessities and is worthless and out of date in a short period of years.

Enthusiasm is a force we are all conscious of and which influences us constantly, but steady determination based on conviction is what in reality makes for that progress which is most worth having, and this is apparent in every phase of national and municipal life.

A recent writer has pointed out that there was no reason why the Holland of three centuries ago, which was richer, more advantageously situated, and in many ways better suited to be the nucleus of a great European power, should not have become one rather than Prussia, which was devoid of these advantages. But the kings of Prussia, by their methods of Government and by wise administration and foresight in good and evil times, built up a State which has dominated and given unity to Germany, while the greatness of Holland is a thing belonging to the historic past, through the lack of those qualities which have raised Prussia.



The Corporation's Suggestion.



Mr. Sutton's Proposal.

And so among cities Chicago has been made a great centre of commerce and trade, not through its natural advantages, but through the determination and foresight of her citizens; while among our greater cities Glasgow may be cited as an instance of the success which often attends courage and enterprise.

Periods of good and bad trade must, from time to time, affect every industry; but we believe the temporary state of trade in a particular trade should have little to do with the action of the community in which it is situated, since that action should be dictated by wider considerations of policy and expediency than those which cause the temporary oscillations in one particular calling.

The fact that the boot trade of this country was especially hard-pressed by foreign competition led to such a revolution and improvement in the methods under which it was conducted that it is now more prosperous than it ever was in the past, and similar improvements may be possible in the conduct of many of our industries.

We have no figures before us which would enable us to judge what the position in Nottingham actually is, but we would urge that it is unwise to condemn any scheme because it involves a large expenditure of money. The question is rather whether it is a wise or unwise expenditure when all the circumstances of the case are considered.

In the case of Nottingham the various departments of the Corporation are, for want of the requisite accommodation, housed in many scattered buildings, and the gross rent of the buildings used has to be taken into account, together with the probability or otherwise of letting such accommodation for good rents for other purposes.

With regard to the proposal for adding to the existing Guildhall, the question is whether with such additions the buildings can be conveniently adopted for municipal purposes for the next fifty or eighty years, having in view the probable development and growth of the city. If not, such expenditure is, in the nature of things, bad and unremunerative, however little it may cost at present.

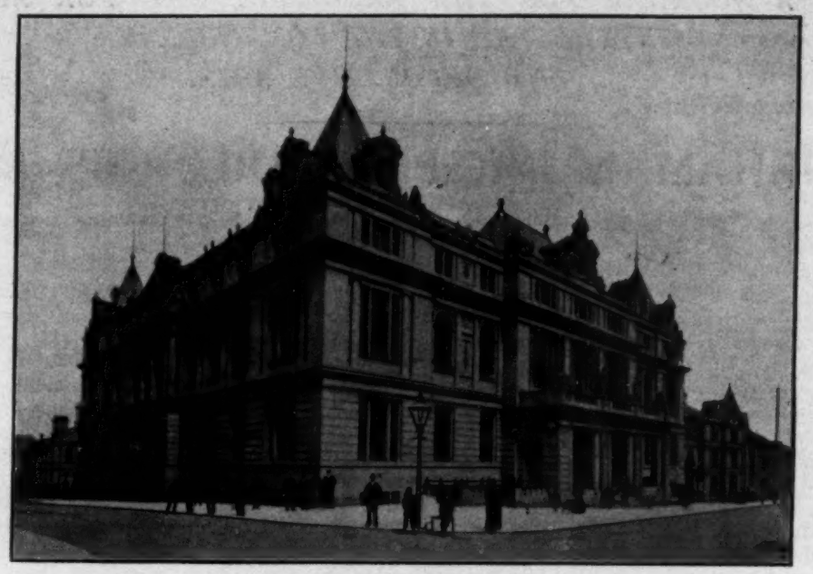
As to the two proposals for building new Municipal Buildings abutting on or in the market-place, a curious point arises, which is, the nature of the value we place on an open space.

We give a photograph of the market-place as it is, from which it can be seen that the buildings surrounding it are of little or no architectural merit, while the plan we publish shows the narrowness and inconvenience of some of the surrounding streets.

Reading many of the extracts from local papers, we learn that the market-place is the pride of the city, and that any proposal to deal with it is looked on by many as a desecration. Frankly, we cannot quite see why this is, and are inclined to believe that what we call old association frequently rests on a certain inability or disinclination to think out questions rather than on the firmer ground of sentiment based on conviction.

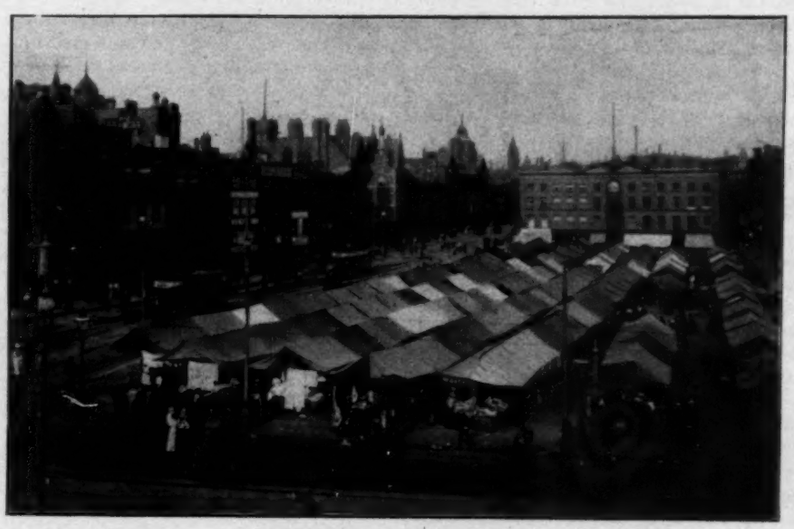
We do not consider that an open

space covered by temporary market stalls is either picturesque or worthy of an important city; it is rather suggestive, to our minds, of a second-rate country town of no importance. We most of us object to see washing hung out in other people's back gardens, though we may indulge in it for an economy in our own case, and the stalls of the Nottingham market-place appeal to us somewhat in the same way. We suppose, if it really is a remarkable municipal economy, Nottingham will cling to it; but it will rather appeal to the visitor in the way our neighbours' washing appeals to us, though in a small Breton or Dutch town it might seem more in keeping. We believe the statue of the late Queen is frequently surrounded by a collection of fish stalls, which, possibly, is a delicate and sentimental allusion to the sovereignty of the ocean, but which, æsthetically, has a less pleasant side.



Nottingham Guildhall.

Messrs. Verity & Hunt, Architects.



Nottingham Market-place.

Of the four alternatives we must say we think, apart from all questions of cost, as to which we have not the necessary data to deal with, that Mr. Sutton's plan is infinitely the best of the suggestions made. It will be observed that by the demolition of the block of buildings at one end of the present market-place the actual open space is not diminished, though it is divided into two parts. The proposed position of the Municipal Buildings is excellent from the point of view of architectural effect, while the open spaces at either end can be architecturally treated.

The surrounding roads are straightened and widened, and it must be remembered in considering the cost of these improvements that they can be carried out gradually over a long term of years. The one important point in such cases is that a definite plan shall be adopted and adhered to. In the same way, as long as a scheme of Municipal Buildings is thought out and planned as a whole, it is easy to arrange that it may be carried out in several sections at different times, as the state of municipal finances make advisable or expedient.

We do not know, as we are not in possession of local information, whether if such a scheme is adopted it would not be commercially profitable to occupy a lower story with lock-up shops, coupled with an arcaded way. We prefer, as all must, the appearance of a municipal block independent of commercial accessories; but we only make the suggestion as one which might well be considered if questions of economy are more than usually insistent, and we do not consider it beyond the limits of architectural skill to treat such a building architecturally and satisfactorily. The New York Municipal Buildings, which are pierced by a street flanked by the station halls of the Underground Railway, are an example of what can be done, with good architectural result.

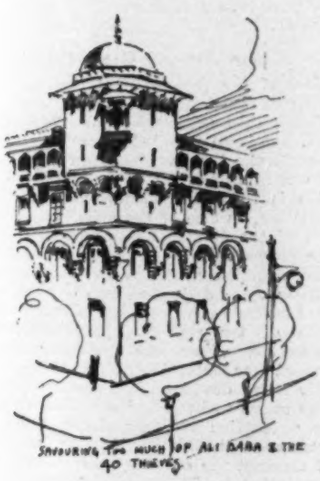
It is, and must be, the problem of the architecture of the day to solve the needs of the present; but we hope that the authorities of Nottingham will not be deterred by mere size and cost, and will recommend the best and soundest scheme to the ratepayers for the present passes, and what is really important is to be able to justify ourselves to the next generation—and to build for posterity.

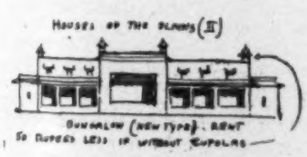
NOTES.

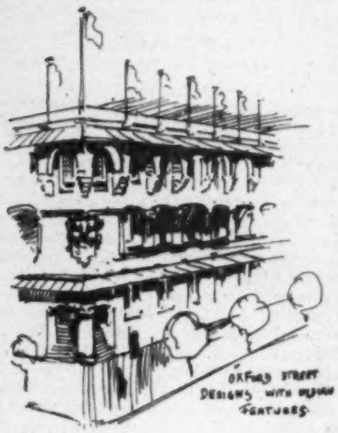
Tapestry Maps. THE eighteenth-century tapestry maps which have been offered on loan to the Victoria and Albert Museum by the Yorkshire Philosophical Society are specimens of the first tapestries to be executed in England, and, apart from their value as specimens of craftsmanship, have unusual historic interest. William Sheldon, who died in 1570, established tapestry works at Weston, in Warwickshire, and sent his master weaver, Richard Hickes, to learn the art in the Low Countries. These maps are supposed to be the products of his skill. They were purchased in 1781, from a descendant of Richard Sheldon, by Horace Walpole, from whom they passed to the Earl of Harcourt, and for some years they hung in a room of his house at Nuneham. Subsequently they were acquired by the antiquary, Richard Gough, and when he died in 1809 he left certain of the pieces to Oxford University, where they now hang in the Bodleian Library. The tapestries are described in "Literary Anecdotes" as consisting of a section of the centre of the kingdom, including the counties of Hereford, Salop, Stafford, Worcester, Warwick, Gloucester, and Oxford, with the north of Berks.

Jerusalem Exploited. WE are not surprised that the Report of the granting of a concession by the Turkish Government to a French financier to enable him to modernise Jerusalem with electric light, tramway to Bethlehem, and other evidences of that triumph of materialism over spirituality which Western nations call civilisation, should have moved the *Pall Mall Gazette* to an indignant and sarcastic protest. The issue raised may not be primarily an architectural one, but we, too, may be permitted to have our feelings and our respect for the holy places. Too often have we seen the spots most hallowed by sacred and venerable associations, or by the achievements of past generations, lose all their value to future ones under the pressure of modern economic conditions. But these conditions do not obtain here. There is no sudden expansion of industrial activity, no great increase in population. It is not the native but the tourist who is expected to pay the dividends on the tramway to Bethlehem. It is just the irony of the whole situation that it is not the Moslem but the Christian capitalist who sees in the vulgarity of his fellow-Christians a chance to exploit the birthplace of their faith.

HOT TEMPLES AS YOU MIGHT THINK BUT BUNGALOW WITH LODGE & DRIVE DESIGNED BY PRESIDENT OF THE "ANTI-PEBBLE-WORN DESK SOCIETY" (IN 20TH BARNET).





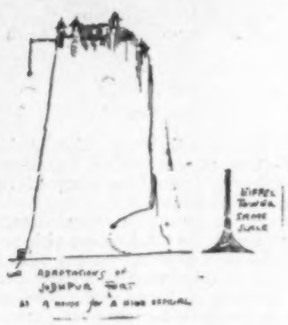


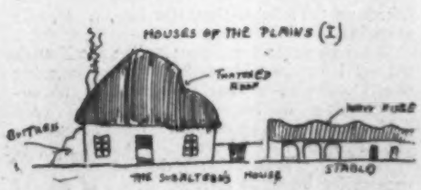
WHAT NOT TO DO AT DELHI!

UNDER the above title Mr. Gordon Sanderson has sent us a delightful series of sketches, by a careful study of which and a resolute avoidance of the various types of building illustrated we can learn exactly what we should do for Delhi.

Mr. Gordon Sanderson's sketches are, in fact, so many danger-signals which keep us off the dangerous rocks of design. Incidentally they will afford some excellent suggestions for the scenery of our future Architectural Association dramas, and may even inspire an architectural W. S. Gilbert with the moral which should adorn his tale.

We do not think that the architectural profession as a whole quite knows how to amuse itself or how much good there lies in the ability to see and understand the humour which runs, often mixed with sadness, through every phase of everyday life. To learn to do so enables us to realise our efforts in proper perspective, which in turn helps us to make ourselves understood by the general public, who, after all, can lift us to fame or condemn us to obscurity. Therefore we welcome such signs of the lighter side of life, and wish we might have a little more of such artistic efforts in our columns.





MR. MAURICE E. WEBB, Vice-President, presided on Monday at No. 18, Tufton-street over an ordinary general meeting of the Architectural Association.

Mr. G. L. Elkington (Hon. Secretary) announced that the third spring visit would take place on February 14, when a visit would be paid to Lansdowne House, by permission of the Marquis of Lansdowne. The party will be strictly reserved to members holding tickets, which may be obtained of the Secretary.

New Members.

The Chairman announced that the Council had elected as hon. members of the Association M. Defrasse, the architect to the Bank of France, and M. Godefroy, architect of Posts and Telegraphs, who were instrumental in arranging the exhibition of students' work held last year. He also announced the reinstatement of Mr. L. H. Glencross and the election of Mr. J. H. Edgecumbe.

Vote of Thanks.

On the motion of the Chairman a vote of thanks was passed to Messrs. Blow & Billerey for their kindness in permitting a party of members of the Association to visit No. 9, Halkin-street on January 31.

SOME NOTES ON GREEK ARCHITECTURE.

Professor W. R. Lethaby, F.R.I.B.A., then read the following paper, entitled "Some Notes on Greek Architecture":—

Preface.

"I have been in some doubt as to what I should address you on this evening. One moment I thought I should like to speak of "Up-to-dation" Architecture, and the Cinema and Tango styles. Then I have really wanted to write a paper on the teaching of architectural theory in France, and the movement of thought which underlies and goes behind the common routine of the schools.

It is possible that some of you suppose that the teaching of Viollet-le-Duc was a mere temporary disease—nonsense which left the great tradition of the studios unaffected. But it is not so in fact. Guadet, the late popular Professor at the Beaux-Arts, taught the all sufficiency of noble structure more clearly than even Choisy and the great master from whom they both derived their doctrine. Even the methods of drawing practised in the ateliers has been revolutionised by no other than Viollet-le-Duc. Take this witness from Salomon Reinach, who, I suppose, is the most widely-learned man in Europe. In a paragraph on architectural drawing, published a month or two since, he said: "English architects have much to learn from ours, who happily perpetuate the tradition of Viollet-le-Duc." (*Revue Archéologique*, 1913, p. 266.) Since writing this I have seen that a book has just been published on "Viollet-le-Duc, His Life, Work, and Doctrine."

We shall never become really like the French till we love clear ideas better than sounding words and value insight more than bluff—blind-man's bluff!

However, I have decided to avoid controversial topics, and I have fallen back on Greek archæology. I should explain that there will necessarily be some little repetition of what I have said before, but this is only in linking up what I hope is new.

Greek Archæology.

In these notes I am going to talk on, and round about, three famous monuments which are preserved in the British Museum—the doorway of the "Treasury of Atreus" (so called), the early Ionic Temple at Ephesus, and the Mausoleum of Halicarnassus.

One of my objects in doing this is to commend to you each severally the idea of taking up the study of special buildings about which you shall decide to know all that may be known. Directly you go beyond the generalities of the comprehensive histories you will usually find it quite easy to make yourself a specialist on one selected building. Amongst those which I have seized as my very own are the three buildings which I have named, and the study has been very amusing. There is something of romance in noticing little points regarding these world-wonders which may perhaps never have been explained since the workmen left them. To give a small example, if I may—You will know that it has been much argued whether the sculptures of the Parthenon were painted. There is plenty of evidence that the backgrounds of the reliefs were painted blue and red, and that the architectural members had patterns, but all beyond that was uncertain. I made a careful search for traces, and at last found two eye-pupils which had been painted, one being that of the eye of Selene's great horse from the pediment, and the other being the pupil of the eye of a horse on the frieze. It follows that all the sculptures were painted.

The Treasury of Atreus.

We have, as you know, in the British Museum the remarkable doorway of the so-called Treasury of Atreus at Mycenæ. It is the most complete specimen of pre-Hellenic or Ægean architecture in any museum. It may be dated about 1200 B.C. You will remember that it has columns flanking the opening which are larger above than below. Ægean columns were generally in wood, and it is entirely reasonable in wooden structures to make the posts bigger above where other timbers are framed into them, and smaller below where they rest on a stone base. I was interested last summer to see the same thinking applied to the wooden posts of Wiltshire cart-sheds. In the British Museum restoration it is suggested that certain red marble slabs decorated with bands of spirals cased the wall surfaces at the sides of the triangular relieving space above the lintel. I gave some reasons once before why these slabs must be accepted as the filling of the space itself, and I will now add two more. These slabs have dowel holes in their beds. They were thus pinned together to form a sort of screen, and they were not cramped to a wall behind them. Again, in Dörpfeld's restoration of tomb II. at Mycenæ, illustrated by Perrot and Chipiez, he shows the triangular relieving space filled with similar spiral-work. Whatever evidence he had, it is most unsafe to differ from the great German expert. I should like to suggest to one of you to make a revised restoration of our wonderful doorway. I may now mention a point which I think is imperfectly understood regarding the construction of vaulted tombs either round like the "Treasury of Atreus" or square like one recently discovered by Sir A. Evans in Crete. These tombs were built in excavations in the side of a hill or covered with a mound of earth. Now, the building of masonry which contracts to the form of a vault in a pit is quite different from the problem of doing it in the air. Not only have you all the abutment that is wanted, but by packing the space between the leaning masonry as it goes up and the side of the pit you can weight the tails of the stones so that they won't fall inwards. In the square stone-covered tomb in Crete described by Sir A. Evans the stones of the sloping roof were long and their beds actually declined outwards. When you consider the packing at the back you will see what a good expedient this was. Doubtless the same sloping beds were continued until the space became contracted enough to complete it with couples of leaning stones. Mr. Fyfe, I think, called these cantilever vaults—an excellent explanatory name. It should be realised that our doorway is no unrelated freak of design; it is a specimen of a type of which many examples have been found at Mycenæ, Tiryns, Orchomenos, Pylos, Knossos, and elsewhere. A painted chest found by the Italians in Crete shows a tomb door with spiral bands on the jambs and cornice and on the door itself.

Ægean Painting and Ornament.

Recent publications by the German Archæological Institute show remarkable results obtained by an extremely careful examination of the traces of painting on the plastered walls and floors at the Palace of Tiryns. The fragmentary evidence has been combined in a wonderful way, which should be a lesson to us in method and refined precision. The walls were painted in the brightest colours, with scenes like processions and the hunting of beasts, and with a great variety of pattern-work. In several cases the dadoes showed remarkably accurate and vigorous imitation of veined marble slab-work, and this imitation must show that polished coloured marble linings were already in use, for where the imitation is there also must the original have been. The doorway of the Treasury of Atreus shows similar liking for the juxtaposition of coloured stones, for, while the main structure was of a light greenish-grey, the triangular tympanum was filled with slabs of red marble* ornamented with rows of spiral patterns. At tomb II. the lintel over the door was of "leek-green marble." The plastered floors at Tiryns were also painted; frequently they were divided up into squares something like a chess board with some simple subject in each. Some of these designs show an intention to make the floor recall the sea, and, as a whole, they are so much like later mosaic floors that it seems as if there must have been some link of connection.

Sir Arthur Evans found a great number of similar wall paintings at Knossos. Painting must have been the primary art in the pre-Hellenic age in Greece, and the earliest form was doubtless pottery painting, in which, at this great time, most exquisite works were executed.

Ægean Art and Greek Origins.

Most of the decoration of the doorway of the Treasury of Atreus is in bands of spirals variously disposed on the surface of the stone-work, but there were other bands divided into alternate panel and vertical-strip arrangements. Both were derived from the painted pottery which is the natural source of such banded decoration, as also of the spirals formed by a twirl of the brush. The panel and vertical-strip decoration coalesced with a natural mode of construction by the use of alternate slabs and posts, and a great number of stone dadoes found in Crete show certainly that this was the origin of the metope and triglyph. First painted bands, then stone dadoes, with alternate bonders, then metope and triglyph; thus was the Doric frieze developed. The sculptured Ionic frieze seems to have had a similar origin. In this connection two remarkable stones from Mycenæ, at the British Museum, which have not received the attention they deserve, must be mentioned. They are fragments of slabs which had oxen well carved on them. The reliefs covered two courses, which, together, were about 4 ft. 6 in. high. A German scholar who showed that they belonged to a band of sculpture called it the "oxen-frieze," but the band was really an oxen dado. We must get it into our minds that the slab dado was perhaps the most characteristic feature in Ægean building work. It probably arose from the use of crude brick concurrently with easy access to gypsum, from which large slabs to protect the lower parts of the walls could be easily cut. Sir Arthur Evans describes an example found by him, where both sides of the lower part of a wall were protected by plain slabs, which must have been fixed when it was built, for the slabs on each side of the wall were linked together with wooden ties having dove-tail ends let into the top edges of the slabs.

Now, our slab fragments at the British Museum have dovetail indents which show that they formed part of a similar dado. Further, the edge of the slabs were rebated, which suggests that they were arranged like metopes with thicker stones alternately. One of the oxen has incised lines on its neck and body, from which we can tell that it must have been painted with dappled colours, and Perrot mentions that he saw indications of colour on the plant which shows above this animal's back. Here, then, we have remnants of a fine architectural decoration, a dado of slabs sculptured with oxen and plants and painted.

* Often wrongly called porphyry, but really "rosso" marble.

The finest known dado-band was found in the portico of the great hall at Tiryns, and I cannot doubt that our oxen dado came from a similar palace hall at Mycenæ. Further, taken together with much other evidence, like delight in rosette decoration, it may not be doubted that the celebrated gypsum-slab dadoes of the Assyrian palaces derived from Ægean sources.* The sculptured dado gradually crept up the wall and became a frieze.

Sir Arthur Evans, in an article dealing with the relations between Ægean and Greek architecture, has pointed out that the crudest sculptured Doric pediment known, that recently found at Corfu, is practically a repetition of an Ægean motive—a central object with two watching beasts. It may be observed, further, that this pedimental subject was sculptured in relief on large slabs which cased over the face of the tympanum. Such carving on slab casings was, as we have seen, a typical Ægean method, and even at the Parthenon the sculpture of the gables was not set in front of ordinary masonry, but the field of the tympanum was first cased over with great slabs set vertically. So was tradition in building carried forward, so Greek art was a resumed and perfected Ægean art. It has been disputed whether the sloping roof was used in Ægean building, but some well-made roof tiles have lately been found at Tiryns.

In the Ægean age it was customary to mark that which was sacred with what have been named "Horns of Consecration." I have no doubt that the very curious lyre-shaped finials, which we call acroteria, set on the apexes of the pediments of Greek temples, were survivals of these horns. Sir A Evans has illustrated a terra-cotta sarcophagus having a cover like a roof, and on the points of it are crescents, and these are doubtless primitive acroteria.

Origins of Moulding.

Ægean art again illustrates quite clearly the origins of architectural mouldings. Just as the painted subject tended to become a sculptured relief, which was completed by painting, so the painted band of spirals led up to the carved bands of spirals of the doorway at Mycenæ. Further, I believe it will be found that a large class of mouldings arose as bands of hollows and projections imitating the painted bands which are so universal on early pottery. Relief sculpture, pattern-work, and moulding are thus for the most part echoes of painting. Besides this imitative source for minor moulded work, there are three main conditions in structure for the larger mouldings and orders of mouldings. First, there is the recessing into a retiring series, as around a doorway; secondly, the projecting capping forming a protective shelter; thirdly, rounding as for a column and the great echinus of its capital. This conception of moulding as founded on certain large structural forms, with added minor shadings, should be helpful to the modern designer who considers principles.

In Ægean architecture we find all these modes of moulding already practised; and Greek architecture proper, of the early period at least, hardly produced anything new, although, of course, great advances were made in refined profiling.

The Ionic and Doric Orders.

The Ionic column must, I think, have been developed as a free-standing pillar. The wide-spreading foundation of its base suggests this, and some of the very earliest examples known were isolated pillars bearing sculptures, as those lately found at Delphi and Ægina. Then we find that Ionic pillars were from an early time used as goal-posts in the circus, and also to mark another goal—the grave. It is remarkable that in one or two Ægean works of art representing contests a pillar appears in the background.

The Ionic column, I do not doubt, was developed from such goal-posts. In the finished order the column has a base in three separate courses—a square block, a circular block, and a rounded or inverted bowl-shaped block, the torus. It has been said by Falkner and others that Vitruvius states that the Ionic Order was first used at the temple of Ephesus, but he does not. He says at the temple of Diana, apparently at Smyrna, and it is probable that the story is part of the myth that this Order imitated the proportions of a girl while the Doric imitated a man. The resemblance of the Ionic capital to a lily is very evident in the fine early example found at Delphi.

It is now generally accepted that the Doric Order was developed from Ægean architecture. I have just said that the metope and triglyph frieze is an adaptation of Ægean dado construction. I have never, however, seen any really satisfactory explanation of the guttæ, or drops, beneath the triglyphs of the Doric frieze, and I venture to put forward one possibility which has lately occurred to me. In modern Switzerland it is customary to shield the ends of projecting beams with a piece of board nailed up against its end section. The bottom edge of this shield piece is cut into several notches, so that the water may the better form into drops and fall. Frequently these casing pieces have five or six such "drops" of a dove-tail form, just exactly like guttæ. Now, as much Greek building was in timber, and, as like causes often bring forth like results, it seems to me quite possible that Greek guttæ originated in such a custom. As you will remember, Vitruvius says that triglyphs did represent the ends of wooden beams.

We now know enough of this Ægean architecture to see quite clearly that our gateway from Mycenæ is not an abnormal curiosity, but an example of a fine, highly-developed, and wide-spread art, intermediate between the early architecture of Egypt and that of Greece. It is no rude stone monument, but a refined piece of true architecture. The great door is nearly 18 ft. high to the lintel and 30 ft. to the apex of the polished red marble tympanum above it. The eyes of the carved spirals were set with blue-glass studs, and bronze adornments were fixed to the lintel. The domed interior, which was nearly 50 ft. across and as much high, was thickly studded all over the surface with bronze rosettes or stars.

The Archaic Temple of Ephesus.

Leaving these origins, we must now jump over 600 or 700 years to the beginning of the great period of Greek architecture. Our example is the temple built by Crœsus at Ephesus, the existing fragments of which are housed in the British Museum. It was being built about 560 B.C., and was a great Ionic structure, of the same size on plan as the later temple. It had several remarkable features, such as curious Ionic capitals and groups of shallow mouldings on the bases, and, above all, sculptures on the lowest drums of its columns. I believe that these last are, in fact, a version of the Ægean sculptured dado. In the basement of the Museum are three or four broken fragments brought from the site of the temple of two sculptured oxen attached to solid blocks. Doctor Murray thought that they must have belonged to capitals, but six or seven years ago I came to the conclusion that they represented what I will call dado blocks to the antæ of the portico. The scale would allow them to range with the lowest drums of the columns, and the Assyrian bulls furnish an analogy for the combination with square blocks. It was rather a leap, however, from Nineveh to Ephesus, even though Nineveh did borrow its sculptured dadoes from pre-Hellenic art, and may have borrowed its bull-guarded doorways also. Quite recently, however, Professor Garstang, of Liverpool, has excavated a series of Hittite monuments in Asia Minor and the parts of North Syria which adjoin. In these we find that the sculptured dado is the principal feature. One of them had a portico with oxen on blocks at the antæ and sculptured bases for the columns. Here, then, I find full confirmation of my old theory as to the Ephesus bulls, and for the view that the sculptured dado was common to Asia Minor and Assyria. The tall bases of the columns sculptured with sphinxes are also interesting prototypes; but the lowest drums at Ephesus are best explained as having pieces of dado wrapped around them. One other carved stone at the British Museum which Dr. Murray assigned to square piers has curious slanting faces, and it must, I think, be a basis to the door-architrave ranging with the antæ dado. Here, then, in the singular and seemingly capricious work at Ephesus we again find only a link in a chain of custom reaching from the far past. Old architecture carried along in its deep current much which we have forgotten even to think about—a great body of ideas which we may perhaps suggest by the phrase "folklore." To return for a moment to the watching bulls. Now we have caught them in early Greek architecture we may harness with them four oxen which project over the doorway of the early fourth-century Heroön, at Trysa, in Asia Minor. The heads of bulls which still later were sculptured on the capitals of columns, of which a late example from Ephesus itself is known, carried on the same tradition. As in Assyria we found the bull door-guardian, so in Persia we find a version of the bull capital. Another fragment in the basement of the British Museum shows on the face an immense egg and tongue about 16 in. deep and wide, and on the return the trace of a volute. This stone is nothing else than the anta capital from the Crœsus temple, as is shown by comparison with many other anta capitals which have been discovered at Samos, Miletus, Ephesus itself, and Priene. In most of these, however, there are three rows of volutes on the return and three rows of enriched mouldings on the front face. The splendid anta capital of Priene at the British Museum is a specimen of this more elaborate variety. The fragment from Ephesus has high interest, as it must be the earliest Ionic anta capital which exists. I wish I might beg that many of the stones in the Museum basement might be put in the Galleries, where we could examine them at leisure. The column bases and capitals of the archaic temple are also wonderfully interesting from the evolutionary point of view; the bases, with their multitude of shallow hollows and rolls, carry on the Ægean system of which I have spoken. The known capitals are of two types—one with volutes which have no central eye, others with a great wheel-like flower filling up the whole rounded space usually occupied by the volute. Such large rosettes in spirals were favourite motives in Ægean decoration, and later Ionic capitals frequently had small rosettes in place of the small eyes of the volutes. I am convinced that the Ionic capital as a whole derives from some undiscovered Ægean prototype.

The whole portico of this temple of Ephesus was a wonderful thing; it was not a mere single or double row of columns, but a double row of eight columns stood in front of an open columnar hall—a vast porch of columns. This arrangement is essentially Asiatic. The central opening was enormous—28 ft. 6 in. Its beam, as has been remarked by Mr. Dinsmore, was the greatest stone in Greek architecture. It is impossible to think that there was more than one of these; that would be an anti-climax. The back end of this temple must have had an extra column, as has been found to have been the case at Samos, and all the inner beams and ceilings of the porticoes must have been of wood.

The Mausoleum.

I had intended to conclude with an account of the Mausoleum, making use of recent writings on that wonderful monument; but my allowance of time must be nearly exhausted. You will know that there has been some controversy as to whether its thirty-six columns were disposed in two rows around it, giving a small plan, or in one row, giving a large plan. Mr. Stevenson supported the small-plan theory, which had been promulgated before the actual discoveries made on the site by Newton and Pullan. Since those discoveries no foreign writer has, I believe, followed the small-plan theory; and recent careful examination of the evidence by the American, Mr. Dinsmore, substantiates the large plan. Indeed I cannot think that anyone now can read over the accounts given by the three explorers—Lieut. Smith, Sir Charles Newton, and Mr. Pullan—without being convinced that this is the only possible solution. One important outstanding matter is that of the spacing of the columns. I before accepted an interval of about 9 ft. 9 in., but I have come to think that a columniation of 10 ft. 6 in. is more probable. It is now known that the gutter fronts of the temples at Priene and Ephesus had three stones and three lion's-head spouts to a bay. Again, Pullan stated that no lion's head at the Mausoleum could have come over the axis of the angle column. But, on correcting the projection of the cornice, I find that the second head from the corner of the gutter would have been over the column. And this becomes the second reason why a similar agreement should be found at every columniation. The gutter stones are 42 in. long, and three of these would give a bay of 10 ft. 6 in. There are many other minor points which I will not now attempt to deal with, but if any students of the Architectural Association should feel a desire to make a restoration of the orders of the Mausoleum, or of the two Ephesian temples, I should be

* Indeed it will ultimately have to be acknowledged that the most of the decorative side of Western Asiatic architecture was derived from Ægean and Hellenic sources.

delighted to be consulted and to put my views at his service. A student of the Beaux-Arts made a restoration of the Mausoleum some twenty years ago; doubtless some other will soon come over to take up the magnificent order of the later temple of Ephesus, which is certainly the most splendid subject for an essay in restoration contained in any European museum. I wish we could do it ourselves before that happens."

Mr. Gerald C. Horsley,
in proposing a vote of thanks to Professor Lethaby, said that one of the benefits of listening to a man of Professor Lethaby's knowledge and research was the living interest he could impart to ancient work by tracing for them its origin and growth. With regard to the origin of triglyphs and metopes, one would like to ask whether the panel and strip decoration on ancient pottery was not derived from an early timber construction which they had always supposed to be the origin of the Doric triglyph and metope, and of details of the Doric entablature. It was also illuminating to hear how Professor Lethaby had noticed in Switzerland the wooden shield at the end of projecting beams was notched so as to allow the water to drip more evenly, and had from this suggested an explanation of the guttæ which seemed a very probable one. Another interesting point was the reference to the frieze in ancient architecture which Mr. Lethaby appeared to trace to the sculptured dadoes in the palace halls of Mycenæ and Tiryns. One was also glad to listen to an explanation of the acroteria—a feature in Greek art which had often puzzled students and of which one would like to hear more. He heartily re-echoed the author's wish that one of their students should take up the restoration of the magnificent Order of the later temple of Ephesus before any student abroad did it. The advice to students to make a thorough study of special buildings was very valuable, for such study would bring a vast amount of pleasure as well as knowledge to the student.

Mr. T. Winton Newman
seconded the motion, and said that after listening to Professor Lethaby it always seemed to him that most of the written histories of architecture were too bare in their recital of architectural facts. They were a sort of dried bones of archæology, and dry bones were not the best food for infants, and he supposed most of them were infants in a way. If histories of architecture could be written side by side with the social conditions of the peoples concerned the student would be able to get a better idea of the necessities of the work and how it arose. And, talking of needs and necessities, it made one think how close a connection existed between the Greek architect and needs and necessities. In the old days they started with the needs and their traditions were established, and finally a perfect state of architecture was reached along the long road of tradition. It was rather helpful to remember this in these present days where needs and necessities were most involved. They were in a network of horrible necessities, but it was consoling to know that these old nations produced an almost perfect architecture in spite of need and necessity. They, however, had an easier task than the present-day architect, for their necessities were simple and their architecture seemed bound up and controlled by their construction. The one did not seem to advance at a greater pace than the other, but in these days it was different. The specialist had stepped in and did not care about architecture a bit; he had invented methods of construction which were practical and one or two experiments proved their practicability. With them, however, they might make a hundred efforts to express a thing architecturally and none could say whether it was a success or not—it was all a matter of opinion. He was reading a book by Professor Lethaby some time ago, and there architecture was defined as "a high response to noble requirements." It seemed to him there was a good deal beyond mere construction in that definition. He had also read another definition by Mr. Ball, of Birmingham, that "design in architecture was something far and away above the strict necessities of construction."

Mr. Theodore Fyfe
said that right through the paper the idea of the sculptured dado appeared to be dominant, and it was interesting how Professor Lethaby had traced it through the great dadoes of Knossos and then to the sculptured bands around the columns of the early temple of Ephesus. He had one point of divergence with Professor Lethaby as to the dadoes. He had spoken of the post and slab idea, and he could not quite understand what was meant by that, because the slab dadoes in the Ægean palaces were slabs and nothing more. He referred to the rebated edges and suggested that they fitted into posts, but he (the speaker) thought the rebated edges fitted into similar rebated edges in other slabs, and all the slabs at Knossos obviously fitted in together tightly. Of course, the construction of the wall was in line with Professor Lethaby's idea. There were wood posts and infilling, and then the structure was covered with either gypsum slabs or painted plaster surfaces. Whether the wood posts projected into the plaster surface he did not know until he had studied the matter further. They may have projected and have been painted or they might have been completely covered up, which was probably more likely, with plaster. Certainly in places the plaster was enormously thick—2 in. and 2½ in.; but in other places it was only about ¼ in. thick—the metope and triglyph were very conspicuous in painted pottery, and he was entirely in agreement with Professor Lethaby as to moulded work being based on painted lines. Mr. Horsley referred to the wood construction being just as dominant as the painted pottery, and it seemed to him that the paper rather bore out that the two systems ran side by side, and that there was a wood construction in the entablature of the Orders which was practically the same as the panel and strip idea which they got not only in pottery, but in a marvellous variety of ways in the painted plaster decoration. He fully agreed with the author in what he said as to the large way of looking at mouldings. What, however, they all got from the lecture was the lesson it gave of the continuity of architecture. They needed lessons of that kind at times, because they had to be educated men, and they ought to know something about that type of their work. The Germans were working well in this field, and the people who were appointed to carry on the work studied art profoundly. The French looked at things in a large way and always wished to reconstruct things.

Mr. Voysey
said he had always felt that most sculpture was not finished until it was painted, for colour was as much needed for their pleasure in life as form. All good architecture had been a growth and a development, and the paper forced that home on them. He considered the whole paper a most splendid argument in favour of evolving their architecture out of conditions and requirements. They had been told how it was that out of conditions and requirements the old Greek work was evolved, and therefore the whole argument went to prove that they should not do as Professor Lethaby advised them, viz., go to the Greek temples to know how to build. If they did that they would neglect their own conditions and requirements, which were vastly different to those of the Greeks. He considered that all classical architecture was a magnificent vehicle for the expression of intellectual culture, whereas the Gothic was a far more beautiful medium for the expression of spiritual culture. They were living in an age when some of them at any rate had an eye to both these cultures, and to be tied down to Classic or Gothic seemed to narrow their outlook. They needed very much to know and understand the spirituality in Gothic as much as to know and understand the intellectual force of the Classic, but if they looked to one or the other exclusively it would narrow their outlook and cramp their expression. He quite agreed with what Mr. Newman had said as to needs and necessities. They were living in a materialistic age, and that was all the more reason why they should remember the spiritual culture which was being so shockingly neglected, for in their study of the Greek they were seeking only the intellectual. They wanted both, but they would get neither by looking in any one corner and keeping their study to one particular style or period. They might, however, learn to do as the Greeks did by an intelligent understanding of their own conditions and needs. He thought Professor Lethaby would probably get some light on the use of the symbols of the horns from Inman's "Ancient Faiths."

Mr. W. E. Newton
remarked that Professor Lethaby was a standing refutation of the idea that archæologists were dry people. It was most interesting to realise that everything in the way of architectural detail had grown together and from one origin. Professor Lethaby had entered a very eloquent plea for what he called their neglected old British Museum, which was full of the most wonderful things. When he went there he always felt how refreshing it was to stand amongst the old monuments, aside for a few moments from the controversies of everyday life. Mr. Voysey had touched on spiritual inspiration and had deprecated the study of Greek architecture because he said it would only give them intellectual inspiration. He, however, felt that to stand amongst those old monuments did give them both spiritual and intellectual inspiration. He, with Mr. Elkington, had looked for the eye of the horse, but whether it was due to their faculties not being so shrewd, or to their activities not being so great as Professor Lethaby's, they could not find it. He considered it would be most helpful for the School to follow up the idea of Professor Lethaby and set half a dozen young men on the British Museum to make a definite restoration work for the year they were studying classical architecture. The fragments in the Ephesus room were really most wonderful and inspiring pieces of hewn stone. In the ordinary way, in thinking of an Ionic cap they had in their minds the illustrations of Chambers; but when they stood under the great cushion of the Ionic caps in the Ephesus room it gave one what one did not get from plates, and one began to realise that he was really viewing a vast monument. Professor Lethaby had suggested a task for them, and he would suggest a task for the lecturer, which was to give them an architect's point of view of the very vexed question of the Homeric house. This always came up against them in their years of classical education, and had only been explained by their lay scholars who did not know a damp-course from a drip-stone.

Mr. G. L. Elkington
said it had occurred to him whether the triangular space over the lintel at the so-called Treasury at Mycenæ did not really form some means of ventilation. Professor Lethaby had suggested that the Assyrians borrowed from the Ægean architecture, but he had always been rather under the impression that the trend of the march of civilisation had been rather from the East to the West. He believed that Nineveh was destroyed somewhere about 800 B.C., and the particular Treasury dated about 1300 B.C. When they remembered that the early population of Greece was composed largely of nomadic tribes, it seemed to him that going back to the very earliest periods there must have been incursions of Eastern people into the land, bringing with them the elements of their architecture and decoration, and that this would account in a great measure for the resemblance of some of the typical features which they had both in Assyrian and Ægean architecture. Reference had been made to the spirally curved slabs, and it seemed to him they had a distinct resemblance to what was found in ancient Hindustani construction. Mention had been made of the slabs being bonded together with timber, and that he believed was also found in Hindustani construction. Was it not possible that what really happened in Ægean architecture was a common parentage with the Eastern people; but that the art was subsequently more highly developed in Nineveh? While the general trend of civilisation was from East to West, there were also local changes, and undoubtedly the Egyptian element was imported, for the Greeks traded with Egypt through the Phœnicians. The early Greeks were a people who could not stand against anyone, and even after the Eastern people settled and founded this Ægean architecture they in their turn were turned out by the Dorian immigration and retired further South, and Crete was the place most favoured by them. That would account for a good deal that Professor Lethaby had found as to the sculptures which appeared to be common with those in Ægean art.

The Chairman
remarked that Professor Lethaby could not help making one controversial remark, which

was that architects had no brains. It reminded him of the story of the housemaid who was asked by her mistress what her young man was and replied that he was a "harchitect." Her mistress expressed some surprise, and the maid explained: "But he is not one of those who really lays the bricks; he only carries them hup." It seemed to show that there was another class of the community who, like Professor Lethaby, felt that architects had no brains. They had a vacant date that session, and he suggested that Professor Lethaby might give a paper on "Have Architects' Brains? If Not, Why Not?" He ventured to say the whole of the profession would be present.

The vote of thanks was heartily agreed to.

Professor Lethaby

said that, in reply to Mr. Elkington, he wished he had any clear notions or even muddled notions as to who the pre-Greek peoples were. The views changed from month to month as the reviews came out. He did not venture on the assertion as to the eye without sending two persons who were pretty good observers to see it. He did not know whether it was the off eye or the near eye, and, of course, it was not so clear as an auctioneer's bill. As to the post and slab construction of which Mr. Fyfe spoke, he ought to make himself clear. He meant simply the alternation of thicker posts and thinner posts. He did not necessarily mean constructive posts, but the common plan in these dados of the alternative longer thin posts and thicker, more upright posts.

The Chairman announced that the next ordinary general meeting would be held on February 16, at 8 p.m., when a paper will be read by Professor Selwyn Image, M.A., entitled "The Serious Art of Thomas Rowlandson."

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE Preliminary Examination, qualifying for registration as Probationer R.I.B.A., was held in London and the under-mentioned provincial cities on November 25 and 26. Of the 115 candidates admitted, thirty-three were exempted from sitting, and the remaining eighty-three examined, with the following results:—

Centre.	Examined.	Passed.	Relegated.
London	34	22	12
Birmingham	13	11	2
Bristol	9	7	2
Leeds	7	6	1
Liverpool	6	5	1
Manchester	13	7	6
	82	58	24

The ninety-one passed and exempted candidates are as follows:—

M. Baker, Sheffield
F. J. N. Bastable, Golder's Green
C. C. Bayliss, Birmingham
P. A. E. Beard, Hammersmith
F. Bell, Scarborough
A. N. Benge, Gravesend
W. A. F. Bowen, Bolton
J. M. Brown, Stonehouse
E. M. W. Burnet, Aberdeen
F. G. M. Butlin, Harpenden
R. B. Carruthers, Regent's Park
A. G. Chase, Bromley
G. H. Cholmeley, London
L. Claydon, Tunbridge Wells
J. G. Clouston, Stratford
G. H. Cock, Shrewsbury
J. C. P. Cock, Devonport
C. R. Connabeer, Southend-on-Sea
R. A. Cordingley, Manchester
H. W. Couchman, Tottenham
C. A. Cregeen, Isle of Man
W. E. Crick, Northampton
W. J. Crosthwaite, Windermere
P. C. Cundall, Manchester
H. E. J. Davidge, Streatham
B. N. Dey, Glasgow
B. L. Dhama, Hyderabad, Deccan, India
C. J. Eprile, Shepherd's Bush
W. B. Finch, Sydney, N.S.W.
C. H. Fitch, Dulwich
H. G. Frith, Cardiff
G. R. Galsworthy, Hyde Park
E. K. Gardner, Leamington
A. J. Garlick, Coventry
F. W. Godfrey, Fulham
W. Gourlay, Glasgow
J. E. C. Guest, Finchley
E. L. Gunston, Reading
F. W. Halfhide, Streatham
I. B. M. Hamilton, Kensington
T. C. Hardy, Glasgow
A. St. B. Harrison, Beckenham
J. Hatton, Sutton Coldfield
W. Hemmings, Newcastle
F. Holyoak, Winchester
W. W. Hopkins, Bromley
R. B. Howell, Reading
T. F. T. Hutcheson, Saffron Walden
S. F. Irwin, Kingston-on-Thames
G. F. Jones, Aberdare
A. D. Kellock, Portobello
G. D. Langham, Leicester
H. G. Lawrence, Peckham
W. H. Lloyd, Chelsea
A. Lomax, Radcliffe
D. N. London, Gloucester
W. D. Long, Sunderland
C. J. Love, Downpatrick
C. G. A. B. Lowther, Bridlington
E. L. Lowy, Holland Park
A. A. Macpherson, Edinburgh
B. Mason, Leeds
E. J. Mayman, Birmingham
D. S. Mitchell, Hastings
C. E. W. Moesch, Douglas, I.M.
D. C. Napier, Taunton
H. L. Oswell, Shrewsbury
K. Palmer, Sheringham
J. M. Pearce, Bristol
A. T. Philp, London
R. M. H. Philp, London
D. G. Porter, London
D. S. Prosser, Penarth
F. H. Reckless, jun., Ecclesall
E. L. Reynolds, Aberdare
D. H. Roberts, Wombwell
J. E. Sanders, Liverpool
F. G. Sharp, Winchester
T. S. Shearer, Chelsea
K. Singh, London
R. J. B. Smith, Kenilworth
W. R. L. Smith, Northampton
C. B. Stewart, Darlington
J. N. Sykes, Stainland
A. L. Walker, Birmingham
W. J. Watt, Aberdeen
W. R. Westwood, Birmingham
S. Willett, Manchester
A. E. Wiseman, Chelmsford
L. Wood, Hipperholme
T. S. Wood, Birmingham

Intermediate.

The Intermediate Examination, qualifying for registration as Student R.I.B.A., was held in London and the under-mentioned provincial cities from November 21 to 28. Sixty-nine candidates were examined, with the following results:—

Centre.	Examined.	Passed.	Relegated.
London	43	26	17
Bristol	3	1	2
Glasgow	3	3	—
Leeds	1	1	—
Liverpool	4	2	2
Manchester	12	7	5
Newcastle	3	2	1
	69	42	27

The passed candidates are as follows, the names being given in order of merit:—

J. C. Bone, Edinburgh
J. V. Hull, Garstang, Lancs.
F. G. Foster, Selby
S. F. Bestow, Clapton
F. C. Saxon, Rochdale
A. Hendry, Aberdeen
H. Mackay, Fulham
A. D. Hoesack, London
P. H. Hanbury, Bath
C. F. Boniface, Petersfield
D. R. Lyne, London
E. L. Doyle, Manchester
C. S. Picton, New Cross
R. W. Wardill, Chelmsford
C. P. Garrard, Ipswich
H. W. Ashman, East Molesey
L. D. A. Church, Epping
J. P. W. Davies, Newport, Mon
C. L. Paice, Cromer
R. D. Graham, Carrickfergus, Co. Antrim
A. Duckworth, Accrington
S. H. Loweth, Hackney Downs
S. Knight, Northampton
A. M. Bisiker, Crouch End
G. Shenstone, Leytonstone
L. J. Ashby, Nottingham
L. J. Routley, Taunton
W. J. Allcorn, Tonbridge
S. D. Appleby, Bolton
J. R. Armstrong, Hawick, N.B.
K. J. Bonser, Dulwich
J. C. Bruce, Newcastle-upon-Tyne
W. G. L. Cheriton, Streatham
M. B. Gill, Crouch End
A. G. Johnson, Leytonstone
H. Z. Kassem, Manchester
E. G. S. Leadam, London
J. P. Martin, Bedford Park
J. Radcliffe, Oldham
Stobbart, F. R., Newcastle-on-Tyne
T. E. Turner, Surbiton
A. J. Wood, Leicester

The number of failures among the relegated candidates in each subject of the Intermediate Examination was as follows:—

A. Principal Styles and General History of Architecture	12
B. 1. Simple Applied Construction	14
B. 2. Theoretical Construction	15
C. 1. Historical Architecture:—	
(a) Greek and Roman	3
(b) Byzantine and Romanesque	—
(c) French and English Gothic	—
(d) Italian, French, and English Renaissance	—
C. 2. Mathematics and Mechanics	1
C. 3. Design	16

Exemptions from the Intermediate.

The following Probationers possessing the certificates required under the regulations were exempted from the Intermediate Examination, and have been registered as Students, viz.:—

F. A. Addey, Earl's Court—Architectural Association, Third Year Course
W. B. Binnie, Kensington—Senior Certificate, Glasgow School of Architecture
H. C. Bradshaw, Liverpool—1st Class Certificate, Liverpool School of Architecture
E. C. Davies, Bedford—Architectural Association, Third Year Day School Certificate
E. Gee, Chester—1st Class Certificate, Liverpool School of Architecture
I. B. M. Hamilton, Kensington—1st Class Certificate, University College, London University
A. F. Hooper, Beckenham—Architectural Association, Third Year Day School Certificate
G. B. Howcroft, Uppermill—Victoria University of Manchester
A. D. Kellock, Edinburgh—Diploma in Architecture, Edinburgh College of Art
A. A. Macpherson, Edinburgh—Diploma in Architecture, Edinburgh College of Art
B. Newboult, Shipley—1st Class Certificate, Liverpool University
R. M. H. Philp, London—Architectural Association, Third Year Day School Certificate
A. R. S. Shibley, Sheringham—1st Class Certificate, Liverpool University
H. J. Tobbutt, Westminster—Architectural Association, Third Year Day School Certificate
S. A. Vincent, Hampstead—1st Class Certificate, University College, London
R. S. Wallace, London—Architectural Association, Third Year Day School Certificate
H. M. Whitehead, Brentford—Architectural Association Four Years' Course
J. Wilson, Kelvinside—Diploma, Glasgow School of Architecture

Final and Special.

The Final and Special Examinations, qualifying for candidature as Associate R.I.B.A., were held in London from December 4 to 12. One hundred and seventeen candidates were examined, sixty-three passed, and the remaining fifty-four were relegated. The passed candidates are as follows:—

L. K. Adams, Birkdale, Lancs.
G. M. Aylwin, Hampstead
J. A. Baskerville, Manchester
P. D. Bennett, Birmingham
H. J. Birnstingl, Kensington, W.
C. W. Box, Benfleet
J. W. Bull, London
C. H. Calvert, Nottingham
J. O. Cook, jun., Clapham
J. G. Cooper, Bolton
R. Cromie, Great Malvern
H. Crone, Bloomsbury
L. A. Culliford, Coventry
O. F. Davidson, Newcastle-on-Tyne
W. F. Dawson, Leeds
H. A. Dod, Birkdale
E. S. England, Oldham
S. H. Fisher, London
G. H. Foggitt, Yeadon
W. W. Friskin, Notting Hill
B. P. Gaymer, North Walsham
H. B. S. Gibbs, Shefield
W. S. Grice, Ealing
R. H. Gutteridge, London
P. C. Harris, Hampstead
C. H. Hartmann, London
W. H. Hatchard-Smith, London
C. D. Hawley, Harlesden
A. V. Heal, Twickenham
J. O. B. Hitch, Vauxhall
H. D. Holland, Wigan
V. H. Hughes, Sandgate
F. R. Jelley, Bayswater
G. H. Jones, Herne Hill
H. Jones, Manchester
W. S. Jones, Sutton
C. S. Kimpton, Ascot
A. B. Knapp-Fisher, Kensington
H. B. Leighton, Sheffield
A. Lowcock, Donfield
A. E. Lowes, Newcastle-on-Tyne
R. N. H. MacKellar, Glasgow
H. W. Mann, Witham
H. E. Matthews, Derby
G. Moerdijk, London
T. N. Newham, Hampstead
W. Paterson, Edinburgh
P. W. Pocock, jun., Egham
H. C. Powell, Stockport
W. Pritchard, Rock Ferry
C. W. Rodgers, Putney
R. T. Russell, London
W. A. Rutter, Westminster
S. Salisbury, Harpenden
T. G. Scott, Norwich
E. Smith, Neath
S. J. B. Stanton, Brondesbury
C. E. Tebbs, Newport, Mon.
W. H. Thompson, Kensington
R. A. Walter, Harringay
C. C. T. Warnes, Edinburgh
F. Woodward, London
L. M. Yetts, London

The number of failures among the relegated candidates in each subject of the Final Examination was as follows:—

A. Design	42
B. Construction—	
(1) Foundations, Walls, Roof, etc.	25
(2) Iron and Steel	37
C. Hygiene	34
D. Properties and Uses of Building Materials	20
E. The Ordinary Practice of Architecture	32
F. The Thesis	15

THE BOARD OF ARCHITECTURAL EDUCATION.

The Board of Architectural Education of the Royal Institute of British Architects announce that the designs submitted by the following students who are qualifying for the Final Examination have been approved:—

Subject XII. (*a*).—"Design for a Lighthouse."—Messrs. F. A. Addey, H. Bagenal, W. B. Binnie, A. S. Burnett, G. W. Callander, J. Carey, L. E. Carreras, G. A. Cosser, A. E. Davidson, G. Davidson, E. C. Davies, H. P. Davies, H. Dicksee, R. A. Duncan, L. A. Elsworth, J. C. Fowell, J. D. Grant, A. F. Hooper, S. B. Howard, G. A. Langdell, H. G. Leigh, R. H. Philp, E. C. Preston, A. W. Robertson, N. S. Robinson, A. Silcock, R. S. Wallace, N. B. Weekes, H. M. Whitehead, F. Williamson, A. J. Wood.

Subject XII. (*b*).—"Design for a Golf Club House."—Messrs. P. J. Adams, W. Allison, H. Andrew, C. H. Aslin, A. M. Barrowcliff, J. Blackford, B. F. Brueton, R. Cawkwell, H. L. Charles, C. C. Cheek, C. J. K. Clark, J. A. Clarke, H. E. Crossland, F. A. Darley, J. Dickinson, A. L. Dotto, V. Dyson, G. M. Eaton, J. C. Farrer, E. Fincham, L. S. Ford, S. C. Garrett, H. T. Goodwin, G. H. Gray, G. L. Head, T. T. Jenkins, H. N. Jepson, R. Lone, H. M. Luyken, J. B. Matthews, A. E. Maxwell, D. J. Moss, W. F. Pennington, C. Rowntree, S. Rubery, T. A. Sanders, L. H. Shattock, Miss Mary Shewen, Messrs. S. G. Soper, W. E. W. Terrell, A. Thorpe, R. A. Threadgold, J. C. P. Toothill, H. S. Triscott, D. W. Walker, J. D. Watt, P. Whitehead, J. F. Wilson, C. R. Wright.

THE CARPENTERS' HALL LECTURES:

ROMANESQUE ORNAMENT.*

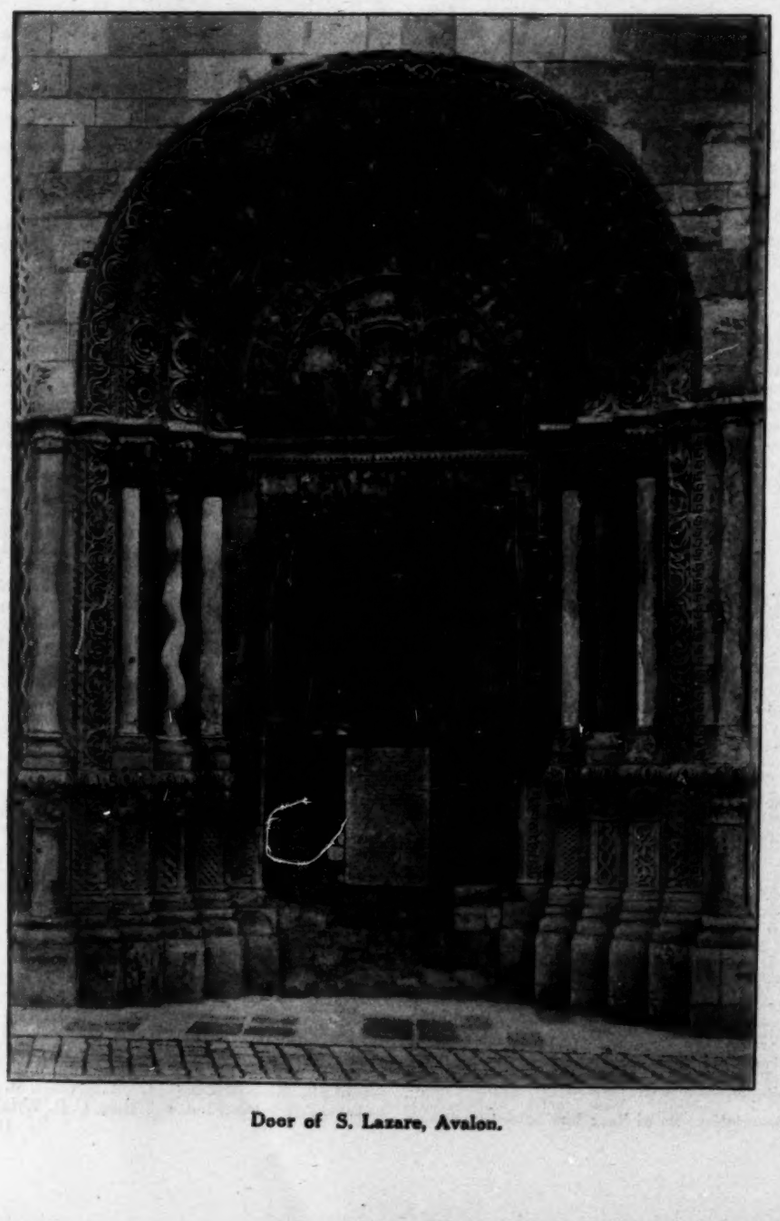
I SUPPOSE each one of us has his special preferences in art matters, and in all probability holds that those forms which appeal to himself are those which are worthiest the attention of all, and in fact that he who does not appreciate them with an equal enthusiasm to his own is lacking in some quality necessary to the full rounding of his nature. This may generally be inferred at least from the opinions expressed in public by those who think themselves qualified to speak, and I am not sure that such heated advocacy is always disadvantageous, for it is astonishing how great an impact is required to force the British public to move even an inch or two towards the appreciation of any matter connected with art. In my opinion "Romanesque Ornament," my subject to-night, is one of the most beautiful styles the world has seen, joining as it does to great ingenuity of arrangement and beauty of line in the design a corresponding completeness and mastery in the use of the materials in which it was carried out, combined with a noble restraint and architectonic feeling which has often been lacking to the craftsman who possessed perfect mastery in the use of the tool.

Romanesque is a name given to a round-arched architecture which was developed from Classic and Byzantine forms, and in which the principles of construction, which subsequently burst forth into the full flower of scientific Gothic, germinated and were developed. These principles are all to be found in Romanesque; and this indicates a mental calibre in the designers and master builders at least not at all inferior to the great names of a later date. The finest examples are perhaps to be found in France, where the genius of the people for figure sculpture allowed of an early mingling of figure and ornament of equal excellence, and our first example shall be the tympanum of the south door of S. Pierre, Moissac, ascribed by M. Marignan to the middle of the twelfth century, though M. Rupin dates it earlier, which is a good example of the sculpture and of a certain type of the ornament of the period in this part of France. Note the curious border made by the convolutions of a folded riband, a pattern which is common in painted decoration, treated rather more geometrically. The large rosettes on the lintel, which is made of several pieces of a Pyrenean marble, indicating a different origin from the rest, are repeated on a fragment at Cahors, between which city and Angoulême the best sculpture was produced in France at this period. At Autun is a fine tympanum nearly an exact copy of one executed at Vézélay a few years earlier except for the pose of the principal figure, and remarkable for giving the earliest instance of the sculptor signing his name. "Gislebertus me fecit" is found in the centre of the band of inscription, "1150." The subject is no longer a Majesty, but the Last Judgment, with the weighing of souls and separation of the sheep from the goats. The border of signs of the zodiac and labours of the months is simply a repetition of the corresponding portion at Vézélay. In these carvings you will observe a strong Byzantine influence in the treatment of the drapery and a conventionality which is only begining to yield to the study of nature; and there is little doubt that the school of Toulouse, the earliest and least accomplished of the French schools of sculpture, so far as its earlier works are concerned, found inspiration in copying Byzantine ivories.

Beneath the tympanum at Moissac is a very remarkable piece of sculpture—the central pier. It is the work of a man of genius, and shows a curious mixture of influences. The pose and interweaving of the lionesses have been held to suggest a Northern origin, which the method of using the tool and rendering detail contradict, while the figures of the prophets at each side recall figures one has seen in Italy, but with a greater feeling for grace and completeness in the rendering of form. Here also the influence of Byzantine design is very evident, specially in the arrangement and treatment of the hair and the flow of the draperies, mixed with apparent study of nature. M. Rupin says it bears the date 1100 and the name Asquilinus. In the museum at Burgos in Spain is an Arab casket of the eleventh century from the monastery of Silos in which this detail of the crossed lionesses occurs among hunting scenes, stags, and animals, resembling Assyrian monsters, which may be traced still further back on a Sassanian vase in the Cabinet des Medailles at Paris, and on Assyrian cylinders, and is plainly one of those Oriental features which were found so inspiring by the ornamentalists of the South of France. It is a matter still disputed by French archæologists, whether the beautiful doorways with architectonic figures attached to the columns of the jambs were an invention of the south, of the west, or of the northern part of France, some holding that the Provençal School influenced the sculptors of Chartres, though this is very doubtful, regard being had to the several dates; some that the sculptures at Le Mans were the earliest, and some that they first were used by Abbot Suger at St. Denis. Unfortunately, the door which we know that he finished in 1140 no longer exists; the dates of many of the existing examples are matters of deduction rather than proof, and the question is complicated by the probability of earlier carvings having been used up at a later date, as was certainly the case in some of the Italian buildings. Take the beautiful west portals at Chartres, for instance, probably erected as a porch between 1150 and 1175. It is evident from the difference in height in the figures, from the change from time to time in the patterns of the intervening portions, and from the fact that some figures have canopies and others none, etc., that if the various parts are contemporary and all made for the same piece of work, the sculptors had so much liberty as to amount to license. You will observe that the pattern sometimes changes with each fresh piece of stone, suggesting that the carving was done before the stone was put in place, while sometimes the design runs through several courses unchanged; and when it is remembered that no less than three foundations for the western walls exist in different parts of the nave, showing two rebuildings, and that there was a destructive fire in 1194, after which the cathedral was entirely rebuilt, I am sure that you will realise that the problem of the exact date of execution of any part is a difficult one. But how beautiful it all is! The majestic figures aiding the stability of the design by the lines of their composition, while the variety of pattern, the excellence of carving, and ingenious composition of line in the ornament is beyond all praise. Doorways of this type of varying degrees of excellence are to be found at Le Mans, Bourges, Étampes, and other smaller churches, and records of their previous existence in several towns where they are no longer to be seen, as well as in other countries.

The ancient kingdom of Arles was separated from the empire of Charlemagne in 879 by the marriage of Hermengarde, daughter of Louis le Debonnaire, with Bozon, Count of Ardennes. At the close of the eleventh century the marriage of the heiress of Provence united her possessions with those of the Count of Catalonia, and various portions of Northern Spain and Southern France were ruled by the same lords during a great part of the Middle Ages. The Spanish royal hero, Jaime el Conquistador, was born at Narbonne, which had been the residence of Visigothic kings, and for forty-two years of the eighth century of Arab sultans. The courts of their Spanish lords were frequented by the minstrels of Provence, and from the Arabian settlers of the Peninsula they derived the ornament of

* The fourth of the present series of Carpenters' Hall Lectures on Arts Connected with Building, delivered by Mr. F. Hamilton Jackson, R.B.A.



Door of S. Lazare, Avalon.

rhyme, the form of their verses, the character of their poetry, and that superior intellectual culture which for three successive centuries made their language and poetry the admiration of Christian Europe. And where this influence affected literature, similarly ornamental art was benefited, though this was only one of the ways by which Oriental forms entered into the repertory of the designer. The Provençals were the natural intermediaries between France and the Crusaders established in Syria, and the church of S. Trophime, Arles, the façade of which is the best known example of Provençal sculpture, elaborately carved with figures and ornament, in its general proportions and profiles is based on the same lines as many of the churches of Syria which the Crusaders saw between Antioch and Aleppo. It must be remembered that Antioch was in Western hands from 1098 to 1268. The sculpture, however, follows the Gallo-Roman tradition in the main, though affected by Byzantine carvings, which were part of the commercial products continually arriving from Constantinople, such as costly covers of books or diptychs, ornamental furniture, and the splendid textiles which were for the ornamentist a still more fruitful field of suggestion. The generally received opinion is that this façade was built late in the twelfth century, or even at the beginning of the thirteenth, as some contend, but certain irregularities in the arrangement of the figures suggest alterations, and it is precisely in those parts that the detail of costume occurs which is relied on, perhaps insecurely, for fixing the later date—the shape of the mitre of S. Trophime in the centre panel of the five. In the cloister is the mortuary inscription of a master builder, Pons Rebolli, with the date 1183, who was priest and canon regular and also operarius of the church, as the inscription states, proving that work was going on shortly before that time, though the epitaph of Pons de Bascle, regular canon, gives the earlier date of 1165. The iconography of the whole is much upon the usual lines: Christ in glory, crowned as at Moissac, with the evangelistic beasts in the tympanum, half-lengths of angels below, and prophets and apostles on the lintel. A fresh detail is the row of the blessed led to heaven in close order on one side, an angel handing their souls to Abraham, and the damned in charge of demons walking through flames on the other, which form a frieze above the row of colonnettes. The church of S. Gilles is a still finer example of the same style, which shows the influence of the antique to an even greater degree in the figure sculpture, and in much of the ornament, while in certain details the copying of *motifs* taken from oriental textiles is equally apparent. This town was one of the principal ports at which the Crusaders embarked during the earlier period of those wars, and was very prosperous, with a flourishing commerce and many rich merchants. The church was commenced in 1116, and the façade is probably of 1140 as regards the main portion, the Albigensian wars and other difficulties, as at Toulouse, stopping the artistic development of the country and sapping its prosperity. It is thought by some that the design was at first arranged as at S. Trophime and that the side doors are a later addition, but the mouldings and the carved ornaments are quite similar on the archivolts and abaci of all three doors, and, though the central door shows signs of change in design, those at the sides are consistent throughout.

At Le Puy, which is a Gallo-Roman town, is an early cloister which Viollet-le-Duc held to be the earliest in France. It has, unfortunately, been thoroughly restored, as has the whole cathedral, with considerable alterations, but a good deal of fine ornament may still be seen. The oldest portion appears to belong to the eleventh, the rest to the twelfth century. The south-east porch is a fine and original conception, probably built at the end of the twelfth century, and showing a type of ornament closely derived from antique forms, but with a suggestion of Arab influence in certain details and in the shape of the bounding lines of the caps. Observe, too, the curious colonnette on the left, which reminds one of our Saxon turned baluster shafts. A triangular tympanum crowns a door beneath the porch, and bears an inscription of the fifth century, and the pattern of opposed S's—perhaps an ancient symbol suggesting fecundity—which surrounds the arch, was also found on some fragments belonging to an earlier church which were excavated on the site. Cattaneo figures a fragment with a similar pattern from S. Maria in Valle, Cividale, among the work of the eighth and ninth centuries, in which that chapel is so rich.

On an isolated rock to the north-west of the cathedral stands the little chapel of S. Michel d'Aiguilhe, looking almost as if it had come out of a mediæval picture. There was an oratory here in the tenth century, but most of the work dates from a couple of centuries later. It has a very fine doorway, unfortunately a good deal restored, which may be taken as typical of the twelfth century carving of this part of the country. Its decoration combines rough inlaid pattern, the architectural arrangement of the carving, some figure-work, and much excellent ornament with a decided Oriental feeling about it. A spandrel at Ani, in Armenia, shows almost exactly the same forms as the scrolls in the spandrels of the trefoiled arch. A rather late doorway at S. Lazare, Avalon, may be given as an example of the great richness which French Romanesque so often shows. The archivolts are covered with ornament upon every member, and the jambs have a series of columns with carving between, which stand upon a very high base, also richly carved with ornament and subjects. The shafts, which now are plain, almost certainly had figures affixed to them, as at Chartres, one of which has been found in the belfry, where it was used as the mullion of a window. The curious carving of chain mail upon a twisting shaft shows that even at this time the craftsman sometimes selected unsuitable ornament, but the whole effect must have been exceedingly splendid when the façade possessed its three portals, one of which has been entirely rebuilt, while the central door has been much altered.

It seems difficult to surpass these French examples in richness, but the Cathedral of Traù, in Dalmatia, has a doorway which shows that it is not impossible. This is a rather late example with traces of Gothic and even Early Renaissance detail, but it is Romanesque in its general arrangement. It was carved by a Slav sculptor named Raduanus, in 1240, with extraordinary mastery over the material in all the ornamental portions, though the large figures of Adam and Eve show the usual failure in treatment of the figure. On the smaller scale of those among the arabesques, however, they may pass muster without attracting attention by their inadequacy, and the lions are decorative, though not much like the living animal. They stand on brackets, and a similar arrangement is met with in Bari and some other of the Apulian towns. The turbans upon some of the caryatid figures, one of which has an expressive face, show contact with Turks or other Orientals, a feature which again occurs in the towns on the other side of the Adriatic.

Instances have been given in which Oriental costumes and details prove contact between the East and the West, but Oriental influence was felt at a very early period. In France especially it can be recognised before the Christian era, Egyptian and Egypto-Greek objects finding their way by the usual trade routes even as far as the Low Countries, probably from Alexandria. After the arrival of the Goths Syrian influence becomes more evident. The museum at Arles proves an active centre there for sarcophagi copied from Roman works, but by its side another was formed in close relation with Ravenna and the East. Examples both at Arles and Toulouse prove their co-existence till the end of the sixth century. Numerous Syrians were in France from the earliest times of the Empire, and the first Gallo-Roman churches were probably founded by Oriental emigrants, a mixed population among whom Jews and Greeks with the Syrians were in the majority. The "Vita Hilarii" mentions Jews at Worms, Cologne, Metz, and Poitiers, and there were many at Arles. Other manuscripts prove that the Syrians were everywhere, and possessed a good deal of power. Gregory of Tours shows them to us very rich and possessing objects of art. Inscriptions show the early presence of Greeks at Lyons, Besançon, Trèves, Vienne, Narbonne, and Arles, and Councils also prove their presence in Gaul. Relics of Oriental saints were brought westward in reliquaries which gave the suggestion of such ornament as appears at S. Jean, Poitiers. As for the Syrians, in the sixth century the most active of the Christian races, S. Jerome says that in his time they were everywhere and that trade was in their hands. Many of them were of the labouring classes; they were gardeners, and through their means the West gained several of its fruit-trees; were artisans, mosaicists, and sculptors; they exported industrial objects, such as glass, silk, leather, etc. Contemporary authors show these Syrians to us in all the maritime towns. At Orleans they formed a powerful colony, and at Paris one of them named Eusebius, in 591, bought the Episcopate by profuse presents, and soon gave to his countrymen the administration of the bishopric. It was by means of the Syrian colonies that the ideas and legends of the East were spread in the Middle Ages, and M. Courajod used to say that it was impossible to exaggerate their importance in the development of design. The biography of S. Columba, by Jonas, monk of Bobbio, shows an affinity of doctrine, of sympathies and beliefs, between the Syrians and the Irish and Anglo-Saxons, which is evident also in their art.

The principal French towns for the exchange of the merchandise of the Levant and Constantinople were Marseilles, Narbonne, and Arles, as in Roman times. The maritime towns of Provence and Languedoc had in the twelfth century, both in the kingdom of Jerusalem and at Constantinople, commercial establishments and mooring places on the quays. Provençals had a church and a quarter at S. Jean d'Acre, while the Narbonnais traded specially with Egypt. The principal Italian commercial towns also had their quarters similarly. Among the ivories imported from Alexandria are the six which decorate the side panels of the pulpit at Aachen, given by Henry II. Dr. Strzygowski has proved that these have the characteristics of the Coptic form of Syro-Greek art; and the chair of Maximian, at Ravenna, an earlier and finer example of ivory carving, has also a very decided Syrian character, though whether it was carved at Antioch, as he thinks, or in Alexandria or Constantinople, appears doubtful. The textiles with hunting scenes in medallions, or beasts, birds, or monsters face to face, of which fragments remain here and there in Western Europe, as at Aachen, Chinon, Toulouse, Sens, Le Mans, and Durham, as well as in museums, are either Byzantine copies of *motifs* of Sassanian origin or Sassanian originals, and an example has been discovered in Japan quite plainly based upon these patterns, which shows that their influence spread eastwards as well as westwards. The patterns carved on Eastern ivory caskets or oliphants, in which relics were sometimes brought to Western Europe, with a similar *motif* also had their effect, such as the Soltikoff horn, a work of the eleventh century, which, if not carved in the East, was copied from an Oriental ivory, the similar horns in the museums of Toulouse and Le Puy, etc. In these ivories the suggestion of Romanesque subject and pattern is unmistakable.

The pillars of S. Saba, in the Piazzetta, Venice, were brought from S. Jean d'Acre, as the sequel to disputes with the Genoese, they having formed the gate to the castle opposite the church of S. Saba. The patterns upon the sides are very characteristic, vine leaves and bunches of grapes issuing from a

Window at S. Abbondio, Como.

vase and controlled to a strict conventionalism in their growth and the spaces which they fill. Upon the upper edge of the pier is a fret with slanting sides, a peculiarity which is found in Celtic interwoven patterns. In this sarcophagus from S. Lorenzo, Milan, you may see absolutely the same conventions in the central panel, and they occur also at Ravenna, Ancona, and elsewhere upon the slabs of ambos and chancel enclosures. The archivolt of the Foscherari monument, in the Piazza S. Domenico, Bologna, made of a portion of an eighth or ninth century ciborium, and much resembling the baptistery at Cividale, has a running pattern derived from Syria, which frequently occurs, with a varying number of leaflets supporting the ball in the centre. In the museum at Cairo is a fragment of ivory carving in which the vine appears springing from a vase in true Byzantine fashion with birds about the branches, which Dr. Strzygowski considers to be Syrian. The arrangement is much like that of an ivory in the cathedral of Tournai, and something of the same kind occurs on the panels carved so well in the tenth century by Tutilo of S. Gall, in which he closely imitated the character of the older Italian work. A sarcophagus found in the cemetery of S. Saturnin, Bordeaux, dating from the sixth century, shows something of the same treatment, and this and other examples are so characteristic as to suggest that a traditional mode of filling a panel with vine leaves and fruit was followed. Among fine examples of arabesque scrolls in Italy the door of S. Leonardo, between Siponto and Foggia, may be mentioned, having beautiful pilasters, well carved, and with birds, beasts, and monsters intertwined among the scrolls in almost perfect preservation. The convent belonged to a German military order, but I cannot see any specially German character in the design, the sharp thistly foliage being rather Byzantine. The figures show the usual inadequacy—note Balaam and the Angel and the Adoration of the Magi on the caps—subjects which recur at Monte Sant Angelo in the same positions. The beautiful ease in the flow of the curves shows that this is rather a late example. At S. Abbondio, Como, are several windows with beautifully carved borderings, and this which I now show I think is difficult to surpass as a piece of ornament. The spaces are well filled, and balance quite satisfactorily without being at all alike, and the contrast of the flatly treated carving with the twisted moulding and colonnettes is very happy. The only drawback is that the little eagle caps are scarcely important enough. The east window of the cathedral, Bari, is another magnificent example of carved ornament of the end of the twelfth century. The elephant supporters below the shafts and the man and woman sphynges above are carved admirably, and the animal forms combine well with the arabesques in the panel below. This kind of window in the screen wall between the towers which flank the apse is peculiar to the Apulian churches, and another example equally beautiful looks over the harbour at Trani from the church of Ognissanti.

The whole of the cathedral of Modena is worthy of attentive study, and I show you now one of the south doors, the Porta Principe, with the story of S. Gemignano on the lintel, and a very fine and inventive pattern of lines which flow and return and interlace, with figures among the arabesques upon the jambs and archivolt, the work of Nicolaus probably, to whom so many of the fine portals are due, as at Piacenza, Ferrara, and Verona. The artist family which furnished architects to this cathedral for 200 years came from the little village of Voltorre, not far from Laveno, on Lago Maggiore. The chapel beneath the choir was constructed with portions of the ancient ambo, of which other portions may be recognised in other parts of the church. Such lions, or griffins, are met with at the doors of churches all over Italy during the twelfth and thirteenth centuries, and have had all kinds of symbolic meanings attached to them. Outside this cathedral they occur, both at the west, north, and south doors. A reconstruction is indicated by the difference in size of the lintel and the archivolt of the north door. On the lintel are subjects from the bestiaries, including the charity of the fowls to the fox in affording him Christian burial, who requites them on the right in the usual manner of the world. Round the archivolt is a subject of knights besieging a castle, one of whom is titled, "Artus rex Brittaniæ." The Arthurian epic, like that of Roland, often furnished subjects for the decorator. At Bari it appears on the archivolt of one of the side doors of S. Nicola, which has evidently been altered or restored,

Door of S. Maria Impensole, Narni.

as the dislocation of the design at the springing of the arch shows, where the two subjects from the labours of the months have been put in. The beautiful arabesques are the work of a Greek, named Basilius, or at least a man of Greek extraction, while close by the west door is signed by two Comacines, Ansaldus and Taddeus, showing that the same amalgamation of the different styles was proceeding here where Byzantine influence was so strong; and it is curious to note that in the door to the left in the same façade the Comacines use the classic egg and tongue; and you may also see the Byzantine ball-flowers and the spiral grooved form (an Eastern detail), while upon the jamb there are figures of warriors fighting among the arabesques, no doubt copied from some ivory casket as in Barisano's work. The west door of the church at Ruvo is, I think, the finest example of the result of the amalgamation of the styles in Apulia. Parts of the church are of the period of Frederick II., but there was an earlier building, and it seems probable that the doors belonged to it, both from the style and from the fact that they seem out of scale with the rest of the façade. Here the arabesques run without a fault, and the surface is enriched without being overloaded, and, though the figures are rather poor, as usual, they are not very conspicuous. A door of somewhat the same character enriches the west front of S. Maria in Piazza, Ancona, and is dated 1210, and signed by the sculptor, Philippus. It shows the same, or even greater, inability to carve the figure, coupled with complete mastery over both the design and execution of the ornament.

At Toulouse are carvings apparently copied from Byzantine embroideries, with pearled scrolls which interlace, and on the façade of S. Gilles are roundels which resemble textiles of Cappadocian origin. From Naples southwards to Salerno ninth-century plaques still exist with winged horses, griffins, and peacocks within circles, or like this one from Atrani, all of which are quite evidently Oriental in their derivation. The well-known subjects on the screen at Torcello, which are early eleventh century, also show the same feeling with greater mastery, and bear considerable resemblance to the panels encrusted on the cathedral at Athens, which M. Bertaux claims to be based on Sassanian *motifs*.

In Frederick Barbarossa's castle at Gelnhausen, the Oriental suggestion is strong, the general form of the caps bearing a likeness to Saracenic shapes, coupled with the Byzantine superabacus elaborately carved. Similar arcades to this one occur at Schloss Münzenberg, Goslar, The Wartberg (which is perhaps the finest example, having several stories), Wimpfen, Seligenstadt, and in other castles. Frederick went with his uncle Conrad to the crusades in 1147–8, and perhaps this may account for the character of the ornament to some extent. The date is 1170, and there is a curious difference between the extreme richness and elaboration of the ornament of the archivolt of the door to the great hall and the simplicity of that applied to the fireplace. At each side is a carved panel—one has an interwoven pattern met with in Rome in the sixth century, and the other a well-known ninth-century pattern of interlacings. The arch of a window opening above and the shafts of the fireplace have a simple zigzag and chevron, and if the two panels were not of the local stone one would suppose that they had been imported in the same manner as Charlemagne imported marbles for his place at Aachen. On one of the capitals the Imperial eagle appears, but it is doubtful whether it has any heraldic signification, for capitals almost precisely similar occur at Toulouse and in other places where there could be no question of Imperial rule. The little town has a very fine church of rather a later date, probably about 1220, but the carving retains the Romanesque patterns in the elaborate ornaments of the jambs and archivolts, and gives a very good idea of the richness of the later Romanesque. Here you may still observe an inferiority in the treatment of the figure-work to that of the ornament, and a certain stiffness of pose, though it is a great advance upon the earlier Romanesque figure sculpture, but the carving of the ornament is excellent, and, indeed, has been styled "Unsurpassable" by a German art historian.

The church of S. Pietro, Spoleto, has older reliefs worked into the ornament of its façade with bestiary subjects, but is work of the end of the twelfth century. Yet the patterns carved upon the jambs of the central door are so antique in style that it is only the perfect fitting of the ornament to the space which it fills which makes it certain that it was carved for its place. An enlarged detail will show this character still more clearly. Now it is a very curious fact that this pattern is almost exactly like the jamb of a door of the Syrian second-century church of Kanawât, figured in the report of the American Archæological Mission to Syria; and it is strange and inexplicable that two sculptors so far away from each other in place and time should hit upon the same treatment of much the same details. Observe also that the rosette patterns of inlay are most of them Oriental. At Narni the doors of S. Maria Impensole are surrounded by similar ornament, which is plainly the work of the same school, the principal of which, the main door of the cathedral, Spoleto, is apparently signed by Melioranzo, who perhaps was the founder. At Verona, too, classical details are of frequent occurrence. The arcaded cornice of the font in S. Giovanni has among the heads, which serve as corbels, a Jupiter Ammon with rams' horns, a Midas with ass's ears, and a head of Zeus. And at Pisa the pillars at the sides of the central door of the western façade are covered with elaborate arabesques which are so antique in feeling that they, too, have been claimed as antique fragments, though the proportions of the columns are not antique, and the corresponding columns of the door of the baptistery are worked with equally beautiful arabesques, the work of Diotisalvi in 1153, while Guido Bigarelli of Como's font in the centre shows a combination of inlay of coloured marbles mixed with foliage, in which the antique influence is often very visible, though the carving on the lintels is inspired by Byzantine ivories. At the Cathedral of Lucca are other columns with similar arabesques based upon classical data, and in the lovely cloister of Monreale, Sicily, one of the most attractive features is the groups of four colonnettes at each angle carved with similar arabesques.

It was probably from the sarcophagi that the arcadings with figures or ornament beneath them, which occur as part of Romanesque decoration, originated. Such compositions as that from the western façade of the cathedral at Modena, in which subjects from the history of Adam and his family fill a series of arched spaces and form a decoration on either side of the main doorway, are not infrequent. At

S. Zeno, Verona, the arched spaces contain a greater variety of subjects, in four rows, each beneath a single arch, ranging from the Creation to the legendary death of Theodoric, with patterns on the bands between, evidently of classical origin; and in the front columns of the high altar at S. Mark's, Venice, probably brought from S. Maria in Canneto, Pola, and dating from the fifth century, a whole series of Scripture subjects is treated in this manner, one figure generally tenanting each niche, which makes them rather difficult to comprehend when many figures are required for the expression of the subject. This rather inconvenient method of rendering Scriptural and legendary subjects was sometimes used at a later date; the similar pillars at the back of the canopy at S. Marco are of the eleventh century, very inferior in workmanship to those they imitate; and in the courtyard of the Archbishop's Palace at Verona is a column of a later period, as the trefoiled arches show, carved with scrolls with a very decorative effect. It was, in fact, the decorative effect which was sought rather than the effective presentment of the subjects.

There is no doubt that the subjects, which the ornamentists used were to a great extent symbolical, though enthusiasts have very much exaggerated the amount of intentional symbolism used by the Romanesque, if not by the mediæval architects and designers. Many forms which originally had definite symbolical meaning with the lapse of years and transference from one country to another lost that meaning and became merely decorative details, to be used as convenient. A very good example of this is the "hom," the sacred tree of the Assyrians and Persians. This, in the hands of the Byzantines, lost all symbolic meaning, and in European designs derived from Oriental patterns became merely a decorative detail. Certain Old Testament subjects were often used to symbolise Christian mysteries. The months and their labours, the signs of the zodiac, as at S. Mark's, Venice, at Autun and Vézelay, round the arch, and sometimes heathen personifications, are constantly found, and, of course, figures of saints, angels, apostles, and prophets, the symbols of the Evangelists, the Agnus Dei, etc. Plants were also used symbolically, of which the one most frequently occurring is naturally the vine. The rivers of Paradise, at which stags frequently are drinking, and the corresponding birds, generally peacocks, drinking from a vase, are often met with, and the cross of various shapes everywhere.

The Psychomachia of Prudentius furnished impersonations of virtues and vices, and the subject of their contest occurs on pavements, and was probably the origin of the popular triumphs of love, chastity, death, etc., at a later period. The bestiaries and early epics were also drawn upon for subjects. Dragons, griffins, and other fabulous monsters occur frequently, and the lion is found with quite opposite meanings attached to his appearance. The explanation of these various symbols has been the occasion of much very fine and informing writing; but, while it is possible to make tolerably certain of the general meaning of the symbolism of the ornament upon a building, the fact that many of the details are copied from or suggested by other works makes it doubtful whether much benefit attaches to the attempt to unravel the symbolism in minute detail. It is much more likely that the craftsman concerned himself merely with the appropriateness of his ornament to place and material than worried himself with its symbolic meaning in the first place; and in smaller works it is still less likely that the symbolism came first, if one may judge by the habits of the craftsman of to-day. In the case of an enthusiast it might be so, but enthusiasts have never been in the majority; in such works as those conceived by S. Bernward, of Hildesheim, and executed either with his own hand or under his direct superintendence, for instance, it is possible that everything may have had a symbolical meaning; for we know that he planned S. Michael's, Hildesheim, with a definite intention, dedicating the building to the Holy Trinity and the Nine Choirs of Angels. It had three naves of three squares, and east and west lay a transept, also of three squares; but I entirely decline to believe that the feeling for symbolism had so permeated the nations of the West as to make it easy for the average public to read obscure symbols, even if it be assumed that the designer used his forms with a definite symbolic meaning. Symbols, to be intelligible, must be familiar, and therefore trite; a fresh symbolism is necessarily unintelligible, or at least uncertain in meaning. On these capitals from the cathedral, Antun, for instance, are seen the subjects of Androcles and the Lion, S. Hubert's or S. Eustace's Conversion, the Presentation in the Temple, and Balaam stopped by the Angel. On the other side are the fable of the Stork and the Wolf, the Baptism of Christ, and a warrior on a griffin—a very curious mixture, the explanation of which on a definite symbolic plan appears to be difficult. My time has expired, and I must conclude regretfully, for my subject is far from exhausted.

COMPETITION FOR NEW MASONIC HALL, LODGE-ROOMS, AND OTHER BUILDINGS FOR THE PROVINCE OF NOTTINGHAMSHIRE.

THIS interesting competition was restricted to practising architects who were members of any Lodge in the Province, and Brother Robert Evans, F.R.I.B.A., acted as assessor.

The proposed building is to front on Chaucer-street, the main requirements including a Masonic Hall 80 ft. by 45 ft., with a floor suitable for dancing and a recess for an organ, a large dining-room to correspond, cloak-rooms, lavatories, and a lounge. The Masonic Buildings proper were to have separate entrance and hall space; a lodge meeting-room, 60 ft. by 40 ft., with preparation-room, a dressing-room, and a dining-room to correspond; a library to be also used as an assembly-room for Provincial Grand Lodge, 22 ft. by 17 ft.; three rooms for meetings of chapters, cloak-rooms and lavatories; a small dining-room, and office for the Provincial Grand Secretary; and this group of rooms was to have internal means of access to the great hall and club premises respectively. Masonic Club premises formed a third division of the accommodation required, and consisted of steward's-room, reading-room, committee and card rooms, a billiard-room, and cloak-rooms and lavatories; this section again was to have internal means of communication with other parts of the buildings; £15,000 was suggested as being a rough idea of the cost of the proposed buildings, but from what we have seen of the designs submitted we consider £20,000 to £25,000 to be a nearer approximation to the sum which the executed work would cost.

In all nine architects competed, having, it is presumed, the happy dual qualifications demanded.

We may say at once that we have no inside knowledge of the great and mystic confraternity of Freemasons, and it is possible that if we had we might be better able to understand the assessor's reasons for his award, which seems to us to be veiled in mystery—a mystery perhaps suitable and appropriate to the subject.

In the winning scheme, that of Messrs. J. Howett & Co., the accommodation asked for is not in many cases provided, the large hall and lodge rooms being noticeably short. The Masonic entrance to large hall is in centre of the north wall, and thus contrary to a Masonic practice, the service-rooms are badly planned, and the plans as a whole show a lack of skill. Nor has the elevational treatment any marked architectural quality—it is commonplace and wanting in distinction.

Mr. A. Brewill, of Messrs. Brewill & Bailey, send in a scheme which to our mind is better; but a great deal of space has been thrown away in the large assembly crush-room without a return in the way of architectural effect, the corridors of communication in the club section and Masonic Buildings section are chiefly lighted from the large crush hall by borrowed lights, nor is the planning and arrangement of the first floor very happy, but it is, we think, a far better scheme than that placed first, though the elevations are not what we should have expected from Mr. Brewill's past record.

The third premium has fallen to Mr. W. D. Pratt, who has submitted a carefully-worked-out plan with many excellent features. The various entrances and the internal planning generally are, we consider, better arranged than in the two preceding designs, and the elevations, while lacking in charm, are careful and scholarly.

But the surprise of the competition is that any assessor should have selected the fourth design, that of Mr. F. W. Gregory (of Messrs. Sutton & Gregory), for a premium, and have had any hesitation in awarding it the first place, to which, unless our want of knowledge of Masonic requirements invalidates our criticism, it was unquestionably entitled. Unlike and apart from any other design in the room, it shows a complete mastery of architectural expression both in plan and elevation. The placing of the entrances is most skilfully arranged, every requirement of use and service appears to have received careful and full attention, and the treatment of the main front to Chaucer-street is a delightful essay in dignified and appropriate design.

We are never surprised at seeing an award in which an assessor has been obviously unable to distinguish what is good, for use and custom have rendered us familiar with such misfortune; but we confess to astonishment when an assessor has clearly been able to select the best for a place and has had doubts as to its superiority over others in the short list.

Of the remaining designs, we noticed No. 6, which is an essay of a Venetian type, having certain pleasing qualities, the buildings being planned round a fountain court, and the large hall forming a domed square in the rear of the block. But, though ingenious and in many ways pleasing, the design shows evidence of immaturity and haste.

No. 1 is a cleverly-planned and well-thought-out design in which the buildings have been made to follow the oblique frontage line to Chaucer-street instead of being kept square with the side lines of the site as in the other cases. In so doing the author has involved himself in some difficulties of planning which he has not altogether succeeded in dealing with satisfactorily, but the scheme as a whole has much merit.

In No. 2 the buildings are planned on a transverse axis with a wide open courtyard along one side of the site, while the remaining three designs do not call for comment.

We hope to give some illustrations of designs submitted in this interesting competition in a subsequent issue.

ROYAL ACADEMY LECTURES ON ARCHITECTURE.

MR. E. S. PRIOR gave the first of his series of lectures on Romanesque and Gothic Architecture on Monday, January 26. Speaking of the value of the study of bygone arts to modern needs, he said that the interest of ancient architecture for us did not consist in its beauty. All beauty that was unearthed tended to discourage modern effort, although there were, he admitted, certain non-creative temperaments which must rest on the antique. Ancient art was more completely understood when the spirit animating it was reincarnated and not merely copied.

"Why," the lecturer then asked, "do clients come to architects? Because the ordinary citizen lacks the building imagination. He cannot conceive what a building is going to do for him till it exists. The education of an architect should therefore largely consist in the training of the imagination to meet the required conditions effectually. This is one of the essential conditions shown in the great styles. Mediæval architecture in Western Europe—Romanesque and Gothic—met its conditions very effectually."

Mr. Prior then pointed out that the efficient creative period of mediæval architecture lasted from A.D. 1000 to A.D. 1500. Cologne, Paris, and London were the three great centres from which the style overflowed to all parts of Western Europe. The lecturer emphasised the fact that the modern ideas related to the words, "English," "French," and "German," had no existence then. The area of Western Europe comprised a large number of small States constantly merging into one another, not crystallised into large permanent forms as now. Consequently the whole creation was never French, English, or German. It was the fashion to say that the French *invented* Gothic and other nations *copied* it. Both terms were misleading. It implied a fundamental misunderstanding to speak of invention at all. If Paris had not existed the course and glory of the Gothic style would not have been very different from what it was. By the term "The French style" no more should be meant than reference

to a group of cathedrals round Paris, while the German style was a name for the distinctive features of Gothic architecture in the Rhine Valley, and the English style meant the cathedrals grouped round London.

The idea of a modern architect, a designer of beauty, was not to be conceived of in mediæval architecture. He who was called architect might be a bishop, a clerk, a mason, or a carver, but had certainly no claim to be called a designer. We should remember, said the lecturer, that to the early mediæval builder only three or four structural forms were familiar. The Romanesque style grew out of the column, the arch, and the circular wall. To the early builders these were the necessities of construction. The same Roman tradition that here initiated and fostered the new style proved its death-blow 500 years later.

The second of the series was given on Friday, January 30. Discussing the sources of inspiration which resulted in the Romanesque style, the lecturer said that it was clear that it was from Rome direct and not from Byzantine art that the rebirth came. The mediæval builders took the later Classic buildings for their exemplar. There was, he said, a clear hiatus not only in the decorative but also in the building arts. The secret of the mortar used by the Romans had been lost. In the sixth, seventh, and eighth centuries the mechanism of stone building was not understood. The Saxon builders in England knew as much as the masons working under the Merovingian kings. The proper functions of a voussoir had been forgotten, as could be seen from the Saxon arches, and the dome of the mausoleum of Theodoric had to be made of a single stone. All this was a clear indication that Byzantine craftsmanship had failed to penetrate to the West. Western art required to grow up again with the help of the Roman ruins. In one point, however, during the long stagnation from A.D. 300 to A.D. 1000, Roman expressions of building were leading architecture on—in plan.

At this point the lecturer said he must turn aside and discuss for a few minutes the subject of planning. There was, he thought, an essential difference between modern and mediæval planning. Modern planning was the solution of a puzzle. Mediæval planning was nothing more than ordering the required accommodation. From a single written description a church could be built. No detailed specifications were needed. The necessities of construction were fixed at any given time and place. There was no such function as designing. This being so, the changes of plan from the sixth to the twelfth centuries express changes or advances in ritual. The simple oblong hall acquired projections of greater and greater complexity, till at an abbey church like Cluny there were no fewer than fourteen apses, which served as sanctuaries and for the display of relics and the like. This need dictated to builders the form of the East End.

Returning to the Basilican forms, the lecturer said that the arch, column, and curved wall were all present. Such a design was more securely founded on these three forms than on any particular building—a Roman Court House, for example. It seemed to him more reasonable to suppose that Christian and pagan buildings were alike based on the same fundamental forms. However derived, the Basilican plan spread widely. Except in Rome, however, the style of construction soon began to alter. Rome supplied an inexhaustible store of ready-made columns, but elsewhere piers with wide arches took the place of column and entablature.

Byzantine influences were evident in the domical features of such churches as St. Mark's, Venice, and San Vitale, at Ravenna. The square plan of the churches of Southern France was also obviously Byzantine; but it was a curious thing that, while accepting domical planning, Western architecture should have rejected the dome itself. Though Charlemagne's church at Aix formed a favourite model for succeeding buildings, its dome was not copied, but became in course of time a central lantern tower. This central tower became a very important feature in Gothic work, and the spire of Salisbury might be regarded as the legitimate descendant of the dome of Hagia Sophia.

If, however, the lecturer pointed out, the constructive influence of Byzantine architecture was quite secondary to that of Rome, its decorative influence was boundless. All Romanesque painting and sculpture derived from Byzantine rather than Roman sources. This influence flowed westwards in two main streams, northerly and southerly, at first separate, but uniting eventually in one broad Gothic stream.

THE ARCHITECTURAL ASSOCIATION:

SECOND SPRING VISIT.

THE second spring visit of the session took place on January 31, the building inspected being No. 9, Halkin-street, W.—a fine town house, built in 1912 upon the site of the Belgrave Chapel, from the designs of Messrs. Detmar Blow & Fernand Billerey.

The character of the exterior can give the ordinary passer-by little clue to the grandeur and refinement within; the architect, being acquainted with the work of Messrs. Blow & Billerey, suspects] it. The building is three stories in height, with attics above, and is faced throughout with 2-in. Dutch bricks; blocked quoins and a projecting brick string are the sole relief from ground to cornice, which is of Portland stone surmounted by a roof of old tiles. There must be difference of opinion as to how far the use of rough brickwork and total avoidance of ornament is justified in a West-end house. Of the extreme reticence of this design and its dignified proportions nothing but good can be said, but the entrance doorway—a traditional Georgian model translated into Dutch brickwork—strikes one as affected rusticity

There can be no doubt, however, as to the success of the interior treatment. The plan is one of dignity and spaciousness, and the internal design of the rooms follows naturally therefrom, showing in the medium of refined Georgian detail a logical sanity of design which shirks no practical need, but clothes all in appropriate and dignified form, free at once from baldness and exuberance. The central entrance conducts the visitor to a stone-faced vestibule, on the left of which is a small business room, while within is the hall and main staircase, commendably open in design and free from encumbering "architectural features," such as make many modern Renaissance houses more suggestive of public buildings than of domestic and social needs. The chief rooms on this floor are the dining-room, boudoir, and library, arranged *en suite* on the east and north fronts, the dining-room to the right of the hall and vestibule, the boudoir (a charmingly-treated elliptical room) at the angle, and the library along the north front in rear of the hall, and of an enclosed secondary staircase and lift interposed between. The dining-room is effectively designed with pilastered and panelled walls, treated in a soft grey-green, a modelled plaster ceiling with elliptical wreath and plain centre, and a wide apse at the service end, allowing space on the one hand for service stairs, lift, and hot plate, and on the other for direct access from hall to boudoir. The library walls are broadly panelled and finished in cream. Throughout the house the simple and effective provisions for blinds and curtains and for such necessary (but sometimes obtrusively irritating) appliances as electric switches and heating radiators were noted and admired. The main stair extends as high as the first floor only, encircling three sides of the hall and conducting to a broad open landing. On this floor are the gallery, drawing-room, and schoolroom, all in communication and providing easy circulation for guests at receptions. The gallery is a very fine apartment, the full length of the house, extending above the dining-room and boudoir. The treatment of its wall spaces is admirably ordered and rhythmic, but the modelled ceiling, though good of its kind, hardly bears that intimate relation to the rest of the structure which is so conspicuous a feature in all other respects. The drawing-room and schoolroom are panelled and painted a low-toned emerald green, stippled on a white background, the reliefs being wiped off.

The second floor, comprising the best bedrooms, with bathrooms, linen-room, etc., and the attic floor, given up to maids' rooms and day and night nurseries, call for no special comment, nor do the well-fitted domestic offices in the basement, but of the whole house it may be said that it is one of the best visited by the Architectural Association during recent years.

ARCHITECTURAL SOCIETIES.

Manchester Society of Architects: Character in Architecture.

At the last meeting of the Manchester Society of Architects Mr. Dixon, ex-President of the Birmingham Society of Architects, gave an address on "The Quest of Beauty." In the course of it he said we seemed to have lost the idea of beauty. A moral and sincere standard of art was wanting. He thought that insincerity and untruthfulness were the greatest vices in connection with modern buildings. There was too great a tendency to display the vices of luxury, sensuality, and insincerity in our buildings. He advised them to burn their rubbish heaps, to set aside their shibboleths, and turn their attention to the morality of art.

Professor Dickie, of the School of Architecture, in proposing a vote of thanks to Mr. Dixon, said that his address had opened up certain trains of thought which they would do well to encourage. He agreed with the ideal that a man should show his inner nature in his work; that the building he raised should in a way portray his character.

Mr. Worthington, who seconded the resolution, said that the work of to-day was expressed in luxury, and he thought competition was largely answerable for this. The result was disastrous.

The Chairman (Mr. Dunkerley) said architects to-day were advised to fall in with the spirit of the time. He, however, did not agree with that advice. Many buildings to-day characterised them as scoundrels and hypocrites.

Replying, Mr. Dixon said that he could not help being pessimistic when he thought of what was going on in the South. The state of things in London was terrible, judged by the different exhibitions that were seen from time to time—exhibitions of architecture, sculpture, and painting. He hoped that these exhibitions need not be taken seriously. One saw pictures of Post-Impressionists and Futurists, and he thanked God that for the most part they bore foreign names. But they attracted English people—London society—and he was certainly pessimistic. He hoped the North would keep the South from further corruption.

Leeds and Yorkshire Architectural Society: English Houses and English Weather.

A general meeting of this Society was held on Thursday, January 29, at the Leeds Institute, Cockridge-street, Leeds, Mr. A. E. Kirk (the President) in the chair.

After the adoption of the minutes of the previous meeting Mr. Roger Oldham gave a paper under the title of "English Houses and English Weather." In pointing out the influence of climatic conditions on the characteristics of the various nationalities the lecturer spoke of the East, with its philosophical unchanging colour. The faultless beauty of Greece, the strength of Rome, the mediæval pageantry of Italy, the mannered stateliness of France, the trim neatness of the Netherlands, and the homeliness of England, the great similarity of Holland to the Fens of Lincolnshire and district, with their big ever-changing skies, then flat, restful landscapes and general simplicity, produced many artists and poets, all imbued with the great feeling of homeliness so well portrayed in their works. Allusions to the future of architectural development to suit the ever-changing requirements of modern invention produced some humorous suggestions. A series of slides shown after the lecture emphasised the various points of argument, amongst others being many excellent engravings and pictures of both Dutch and English artists.

In a spirited discussion which followed Mr. Smithson proposed, and Mr. Hoffman Wood seconded, a hearty vote of thanks, which was unanimously expressed to the lecturer.

KING EDWARD VII. MEMORIAL, EDINGBURGH.

At a meeting, held in Edinburgh on January 20, of the Executive Committee for the Scottish National Memorial of King Edward, under the presidency of Lord Strathclyde, the proposal to erect handsome gateways on the north and south sides of the forecourt at Holyrood Palace was finally adopted. The Committee approved generally the gateway designs submitted, after the limited competition of July, 1912, by Mr. G. Washington Browne, R.S.A., and asked him to prepare a full design in detail, embodying a figure or medallion portrait of the late King.

THE SURVEYORS' INSTITUTION:

PRELIMINARY EXAMINATION, 1914.

THE following Candidates have satisfied the Examiner :—

T. E. Armistead, Bradford
R. D. Badcock, Lymington
F. Barnes, Herne Hill
R. H. Barnes, Leyland
Wm. J. G. Beach, Street
G. T. Beale, Streatham
W. H. Bennett, Stamford Hill
A. E. Boucher, Lutterworth
R. W. Bright, Bushey
G. B Brown, Watford
H. H. Buckle, Lichfield
H. V. Budgen, East Grinstead
K. W. Calvert, Bath
J. L. Charles, Leeds
S. J. Chittenden, Hove
C. H. Collins, Birmingham
J. H. Collins, Bradford
E. L. Colston, Gerrard's Cross
E. T. Covington, Clapham
F. M. Craston, Manchester
L. Dallow, Birmingham
N. H. N. Darley, Newton Abbot
A. J. Davis, Highbury
A. H. Dawes, Wellingborough
H. Digby, Woodford Green
V. C. Donaldson, Clapton
A. Donn, Maida Vale
L. F. Dunbar, Hemel Hempstead
G. F. Edwards, Bewdley
C. E. Elliott, Bournemouth
H. M. Enderby, Skegness
E. M. Evans, Aberystwyth
J. E. V. Evans, Llanelly
R. C Evans, Wrexham
G. F. Fisher, Birmingham
A. H. Fisk, Bushey
A. E. P. Grant, Llanidloes
R. J. Gratton, Ashbourne
A. F. Greenwood, Bradford
T. C. N. Hall, Shrewsbury
S. J. Hannaford, Chulmleigh
E. A. Hardman, Enfield
A. Hinxman, Winchester
W. S. Hobson, Disley
K. S. Holland, Bishop's Stortford
C. J. Homer, Birmingham
G. H. A. Hughes, Luton
F. Jenkins, Keynsham
A. S. Jennings, Worcester
D. S. Jones, Llangennech
H. A. R. Jones, Oswestry
R. O. Jones, Carnarvon
G. A. Joy, Wimborne
E. G. Lake, Brockley
*F. Lamberth, Cricklewood
P. L. L. Lea, Birmingham
K. Liell, Purley
K. H. Limmer, Cromer
H. K. Livemidge, Great Crosby
H. Makinson, Leigh, Lancs.
E. P. Miles, Guildford
W. Minifie, jun., Bridgnorth
H. Norman, Hasland
B. Oliver, Walton-on-Thames
H. J. T. Paige, Heage
G. O. W. Palmer, Cambridge
R. H. Parkins, Barnet
A. C. Patching, Worthing
K. L. M. K. Pierson, Shoreham
J. L. Porter, Colwyn Bay
J. L. Postlethwaite, Doncaster
G. P. Price, Birmingham
N. F. Proctor, Chiswick
R. J. Prydderch, Leeswood
J. W. A. Pyper, Bath
D. Rayner Cambridge
R. G. Redington, Great Ryburgh
J. C. Roberts, Carnarvon
H. P. Ruthven, Aldershot
E. M. Sant, Stansted
T. A. Sims, Salisbury
G. A. M. C. Smales, Dover
P. G. Sneath, Hampstead
A. Stocker, Fulham
C. A. E. Stredder, Acton
R. E. Symonds, Norwich
T. O. Teasdale, Carlisle
N. Thacker, Lypiatt
T. H. Walter, Forest Hill
P. L. Ward, Bere Alston
W. C. G. Warne, Faringdon
N. A. C. Weir, Manchester
G. Weston, Bedford
H. E. Whorwell, Dover
L. O. Wilkes, Redditch
H. C. Williams, Birmingham
F. G. Wilsher, Brighton
A. F. Wyeth, Epsom

Scottish Candidates.

T. Craig, Glasgow
T. Fulton, jun., Kilbarchan.

* Head of list.

BOOKS.

Cement, Concrete, and Bricks. By Alfred B. Searle. (Constable & Co., Ltd. 1913. 10s. 6d. net.)

THIS work forms one—presumably the first—of a series entitled "Outlines of Industrial Chemistry." It is obviously written by a chemist, and the chemistry, of an abstruse and difficult type, is powerfully handled by a master of his subject.

The author differs from many of his contemporaries in attributing the useful properties of Portland cement to a series of triple compounds of silica and alumina, with lime as a base, and points out that many such analogous compounds can be formed just as there are many benzines and paraffins of similar molecular type in a sample of crude oil, which, according to their varying percentages, give it very variable qualities. Indeed, he goes further, and points out the analogy of the benzine "ring" or association of atoms with the molecular structure of a particle of cement.

Having regard to the detailed explanations of fairly obvious facts in other parts of the book, it seems a pity that space for a page or two of explanation of the stereo-chemical formulæ and diagrams could not have been secured by a judicious pruning elsewhere, particularly in the numerous repetitions which occur with almost painful frequency throughout the volume.

Great stress is laid, and rightly laid, on the importance of testing cements with 75 per cent. of sand. Full directions for making these tests are given, and their significance is ably discussed; but why the author should recommend a twenty-eight days' sand-test as proof of the presence of Kentish rag adulteration when a drop of acid will cause brick effervescence in a sample thus sophisticated is rather past comprehension.

Testing a sample bar for transverse strength (beam fashion) is seriously advocated as the coming thing, and in these days of reinforcement the test becomes doubly valuable.

If the writer of these notes might venture to throw out a suggestion he would like to hint that more concordant results would probably be obtained from these transverse tests if the test bar instead of being straight were so curved or thinned near its ends that the two end abutments were in the plane of the neutral axis of the specimen at the point of rupture, thereby eliminating sliding on the supports before fracture.

A regrettable but fairly obvious printer's error occurs on page 127, where the compressive strength of cement cubes is given at a minimum of 250 lb. per square inch instead of 2,500. It is difficult to challenge the accuracy of the footnote on the same page, but if it is true that in a sample of very old mortar the tensile may exceed the compressive strength, the fact is of such importance that it should be discussed in a chapter rather than stated in a line.

Much space is devoted to the selection and manipulation of suitable sands and aggregates for concrete, and where selection is limited, rules are given for ascertaining the suitable proportion of cement.

Waterproofing cement receives careful attention, but the author evidently thinks but little of advertised nostrums, and advises the use of either soft soap or ground burnt ballast as ingredients of the original unset concrete.

Reinforced concrete is dealt with in several chapters of a very practical character; the better-known systems are described, and some attempt is made to indicate their respective spheres of utility. The calculations necessary for designing such work are purposely omitted as being beyond the scope of the volume.

The remaining chapters on brick-making are relatively disappointing, and appear to consist to a large extent of digests of chapters in larger works by the same author to which the reader is constantly referred.

Add to this a few harrowing stories of the misguided individuals who did not consult an expert (or perhaps the right expert) and some quite interesting descriptions of continuous kilns, and there is not much left to be said about the contents of the brick section.

One would have thought that in a work specially devoted to bricks and cement the strength of the two in combination might have been discussed and that the action of hot cement clinker and fuel ash on kiln firebricks would at least have been referred to; but such is not the case, and one puts down an interesting book with reflections as to how much more useful it might have been made, and with regrets at the unequal merits of its component parts.

GENERAL NEWS.

Professional Announcement.

Mr. L. W. Barnard, F.R.I.B.A., of Messrs, Prothero, Phillott, & Barnard, architects, Cheltenham, has opened a branch office at Old Bank-chambers, Chester.

Durham County Architect.

At the quarterly meeting of the Durham County Council a letter was read from Mr. W. Crozier, the County Architect, resigning his appointment after twenty-five years' service, as he found the work, which had increased very much, was now too arduous and exacting and was affecting his health. The letter was referred to the Works Committee to consider the terms and conditions of a fresh appointment.

Sir Alfred East Memorial Exhibition.

The opening of the Memorial Exhibition of the work of the late Sir Alfred East, R.A., at the Leicester Galleries is now fixed to take place on Saturday, February 7. The deceased landscape painter will be thoroughly represented in this exhibition, one room being devoted to his oil paintings, another to his water-colours, while for the first time a complete collection of Sir Alfred East's etchings will be shown. Mr. Edmund Gosse has written an essay on the Art of Sir A fred East for the catalogue of the exhibition.

Adaptation of a Tudor Farmhouse.

An interesting case of adapting an unusually perfect Tudor farmhouse to suit modern needs, "Culmer," Witley, Surrey, has just been carried out for Mr. J. E. Eastwood, of Euton, Witley. The whole of the sanitary plumbing work, including hot and cold water services, was executed by Registered plumbers and marked under the system of marking introduced by the Worshipful Company of Plumbers, London, for the purpose of identifying the work of Registered plumbers as a security to the owners of house property and occupiers. Water fittings of standard quality and bearing the standard mark of the Incorporated Joint Committee on Water Regulations were used throughout. Mr. W. D. Caröe, M.A., F.S.A., Westminster, was the architect, and the sanitary work, etc., was carried out by Messrs. John Knight & Sons, Registered plumbers, Chelsea.

St. Alban's, Holborn.

We learn that Mr. J. N. Comper is appointed as the architect of the Lady Chapel in the Church of St. Alban the Martyr, Holborn, which will constitute the memorial in London to the late vicar, the Rev. Father Stanton. The church, after the Middle Pointed style, and clergy-house were erected after designs by Butterfield in 1861-2; the frescoes at the east end were executed by Preedy, from Mr. Le Strange's designs.

The Safety of Glasgow Cathedral.

The Board of Works has received permission from Glasgow Corporation to sink a trial pit at the south-east corner of Glasgow Cathedral, between two buttresses adjacent to the old well, in order to determine whether defective foundations are the cause of fractures in the building at that corner.—*Times.*

Direction Posts and Plates.

The Permanent International Association of Road Congresses have issued the awards made at their third Congress for the competition for Direction Posts and Plates. Mr. E. S. Sinnott, M.Inst.C.E., County Surveyor of Gloucester, is placed first; Messrs. W. & F. Wills, Ltd., Bridgwater, second; and Messrs. W. Weeks & Son, Ltd., of Maidstone, third. The designs are no doubt very good from the practical point of view, but we think a little more effort might have been made to obtain a result satisfying æsthetic demands at the same time.

Queen Victoria Memorial: The Initial Design.

In the official Report made to the King by Lord Esher, Chairman of the Special Committee of the Queen Victoria Memorial, Lord Esher states that the work is completed and the fund is closed; the subscriptions amounted to about £325,000. He states, too, that King Edward insisted that the Memorial, besides being personal and not utilitarian, should be erected in London. The preliminary sketch was, he reports, "admirably done by a young and talented draughtsman, now a surveyor of the Office of Works, and the sketch formed the basis of the designs soon afterwards invited." The surveyor's name is Mr. R. J. Allison, A.R.I.B.A.

The House of the Knights, Rhodes.

M. Bompard, French Ambassador to the Porte, has acquired for the Republic the early fifteenth-century House of the Knights at Rhodes, which in former days was the palace of the French Priors of the Order of Jerusalem. The fabric, distinguished by a façade with decorative carving of heraldical shields and devices, is, we understand, in a fairly well-preserved state.

Rochester and Chatham Main Drainage Scheme.

Mr. W. H. Radford, of Nottingham, author of the recently completed main drainage system for Bath, is the engineer of a scheme to institute a main drainage system for Rochester and Chatham at a computed cost of £300,000, to be carried out by a Joint Sewerage Board. The outfall works will be on the bank of the Medway, five and a half miles from Chatham, for treatment of the sewage and the discharge of the effluent into the river.

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ILLUSTRATIONS.

The R.I.B.A. Students' Drawings:

"An Official Country Residence for a Royal Personage in the United Kingdom."

"THE scheme should combine the dignity of a residence or palace with the rural character of the private house of a nobleman." These words were included in the conditions of the competition for the Soane Medallion, and have formed the strongest factor in determining the situation, group, and detail of the entire project.

They also suggest that a lofty romanticism would find more favour than the stately magnificence suitable for buildings in or near cities.

One can behold many situations in the United Kingdom where this romantic type of building would harmonise with the surrounding country, and a position on the high land above the River Dee, in Aberdeenshire, would appeal to some noblemen as an ideal site upon which to settle in their leisure time.

The traveller approaching round the north-east bend of the river would first espy above the cliff the roofs of the dog kennels, then the stables with servants' bedrooms over. Thence by stages always ascending his eyes would be directed from roof to roof, chimney to chimney until they finally rested in contemplation of the corbelled summit of the tower crowning the suite of State apartments, and commanding views in all directions.

Here the traveller lingers awhile, and as he resumes his journey, following the direction of the ever-moving stream as it winds towards the south, the garden front and tower gradually disappear from the view, lost amidst pergolas, gazebos, and sweet-smelling groves.

CYRIL A. FAREY.

The illustrations of Mr. Bradshaw's design, shown by the plan and sheet of details, are indicative of that broader system of architectural education which is now in the ascendancy. Judging the plan by comparison with similar *projets* of the French school, upon which this design is evidently based, it lacks that effective modelling of parts which form the primary attribute in French planning; in addition, the shape of the palace plan is far from convincing and appears merely as an incident in the lay-out of the grounds. Mr. Bradshaw is an exceptionally young and brilliant student, and his five years' study at Rome will develop his planning ideas.

The Tite Prize.

A Certificate and £30 (for travel in Italy). Subject—Design for the best imaginative composition in perspective for an important fountain, with which is to be associated large-scale sculpture.

No particular site was given, but the author of the winning design, Mr. Trenwith Wills, chose to imagine his monumental fountain to be at the foot of a steep rocky incline acting as the terminus of a great axial road leading out from a city to the hills behind, the main theme being the interception of a mountain stream and the direction of the flow of water over a series of steps, flanked by two powerful terrace walls, into three cascades, which precipitate into a large basin. A colonnaded loggia, approached by flights of steps, forms the architectural background to the composition. The sculpture employed is indicative of the freedom of water.

Mr. Wills, who is a student at the Royal Academy Schools, previously took his Certificate in Architecture at the Schools of Architecture, University of Liverpool.

MEETINGS.

FRIDAY, FEBRUARY 6.

Royal Academy of Arts.—Mr. E. S. Prior on "The Summit and Decline of French Gothic Art." 4 p.m.

Institution of Civil Engineers (Students' Meeting).—Mr. R. C. S. Walters on "Ancient Surveying." 8 p.m.

Northern Polytechnic Institute.—Mr. P. M. Fraser on "Ferro-Concrete as Applied to the Construction of Factory Buildings."

SATURDAY, FEBRUARY 7.

Aberdeen Architectural Association.—Mr. G. Bennett Mitchell on "Doors and Doorways." 7.30 p.m.

MONDAY, FEBRUARY 9.

Royal Institute of British Architects.—President's address to students. Presentation of prizes. 8 p.m.

The Surveyors' Institution.—Mr. F. W. Hunt on "Value as Applied to Real Estate." 8 p.m.

Incorporated Clerks of Works Association (at Carpenters' Hall, London-wall).—7 p.m.

Liverpool Architectural Society.—6 p.m.

University of London (Victoria and Albert Museum).—Mr. Banister Fletcher on "Renaissance Architecture." 5 p.m.

TUESDAY, FEBRUARY 10.

The London Society.—Mr. Leon Gaster on "The Lighting of London." Lantern slides. 8 p.m.

Society for the Promotion of Hellenic Studies (at Burlington House).—Miss J. E. Harrison on "Poseidon and the Minotaur." 5 p.m.

Institution of Civil Engineers.—Mr. A. Scott on "The New Harbour-Works and Dockyard at Gibraltar." 8 p.m.

Royal Sanitary Institute.—Mr. E. T. Hall on "The King Edward VII. Welsh National Memorial Sanatorium, Ponty-Wal, South Wales." 7.30 p.m.

University of London (British Museum).—Mr. Kaines Smith on "Greek Art and National Life." 4.30 p.m.

WEDNESDAY, FEBRUARY 11.

Royal Society of Arts.—Mr. R. A. Peddie on "The History of Colour Printing." 8 p.m.

Carpenters' Hall, London-wall (Lectures on Arts connected with Building).—Mr. H. W. Cubitt on "The Logical Treatment of Modern Construction." 7.45 p.m.

Manchester Society of Architects.—Mr. L. B. Budden on "Sources of Architectural Inspiration." 6.30 p.m.

Edinburgh Architectural Association.—Mr. G. W. Tulley on "Drainage." 8.15 p.m.

Northern Architectural Association.—Professor Reilly on "Neo-Greek Architects at the End of the Eighteenth and Beginning of the Nineteenth Centuries." 7 p.m.

THURSDAY, FEBRUARY 12.

Royal Society of Arts.—Major P. Molesworth Sykes on "Khorasan: The Eastern Province of Persia." 4.30 p.m.

Institution of Electrical Engineers.—Mr. R. T. Smith on "Some Railway Conditions Governing Electrification." 8 p.m.

The Society of Architects.—Mr. Ainsworth Hunt on "Buildings for Small Holdings." 8 p.m.

Society of Antiquaries.—8.30 p.m.

The Concrete Institute.—Mr. W. A. Green on "The Differential and Integral Calculi for Structural Engineers." 7.30 p.m.

University of London (British Museum).—Mr. Banister Fletcher on "Ancient Architecture." 4.30 p.m.

University of London (Victoria and Albert Museum).—Mr. Kaines Smith on "The Nature of Beauty." 3.30 p.m.

FRIDAY, FEBRUARY 13.

Leicester and Leicestershire Society of Architects.—Rev. E. I. Fripp on "The Place and Function of Iron in Architecture." 8 p.m.

Architectural Craftsmen's Society, Glasgow.—Mr. Donald Gair on "The Restoration of an Historical Building." 7.45 p.m.

COMPETITION NEWS.

It must be understood that the following paragraphs are printed as news, and not as advertisements; and that, while every endeavour is made to ensure accuracy, we cannot be responsible for errors that may occur.

The list of current Competitions is printed on page 175.

Barnsley Town Hall Competition.

Members of the Society of Architects are notified that some of the conditions of this competition are not in accordance with the regulations adopted by the Society, and they are requested to refrain from competing until the conditions have been amended.

Plans for Villa-Flats, Italy.

H.M. Vice-Consul at Venice (Mr. G. Campbell) reports that an Italian company has arranged an international competition of plans for the construction of villa-flats at the Lido, Venice, at a total cost not exceeding £80,000. Prizes of 12,000 lire (£480), 8,000 lire (£320), and 5,000 lire (£200) will be awarded, and plans must be sent, not later than noon on June 30, to the "Direzione della Compagnia Italiana dei Grandi Alberghi, S.M. del Giglio 2,467," Venice, whence further particulars may be obtained. H.M. Vice-Consul adds that the Lido has lately become a popular resort, where visitors rent the entire floor of a villa-flat, and plans are required for buildings of this type. Some further particulars of the villas and of the conditions of the competition may be seen by United Kingdom architects, etc., at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, London, E.C.

CORRESPONDENCE.

Combines and Trusts.

SIR,—Has not the time arrived for architects and builders to take action against the combines and trusts concerned in controlling the markets of building materials?

Where prices have risen by reason of the extra cost of labour and raw material no one can reasonably complain, but not even the manufacturers can maintain that the prices now charged for some materials represent a fair market value.

The hands of merchants are so tied that they are only allowed to supply goods produced by members of the combines.

I suggest that architects and builders should agree, in the interest of their clients, to support manufacturers outside the combines and merchants who retain their freedom of action to stock and supply materials, whether protected by combines or not, as they think fit. For this purpose a list of free manufacturers and merchants should be published to enable buyers to support them.

It may be considered desirable to call a meeting so that the methods adopted by the combines to kill healthy competition could be exposed, when, I think, hundreds of signatures to an undertaking to support independent firms would be given, but, as there is already a strong feeling on the matter, I do not consider this step is at present necessary. M.S.A.

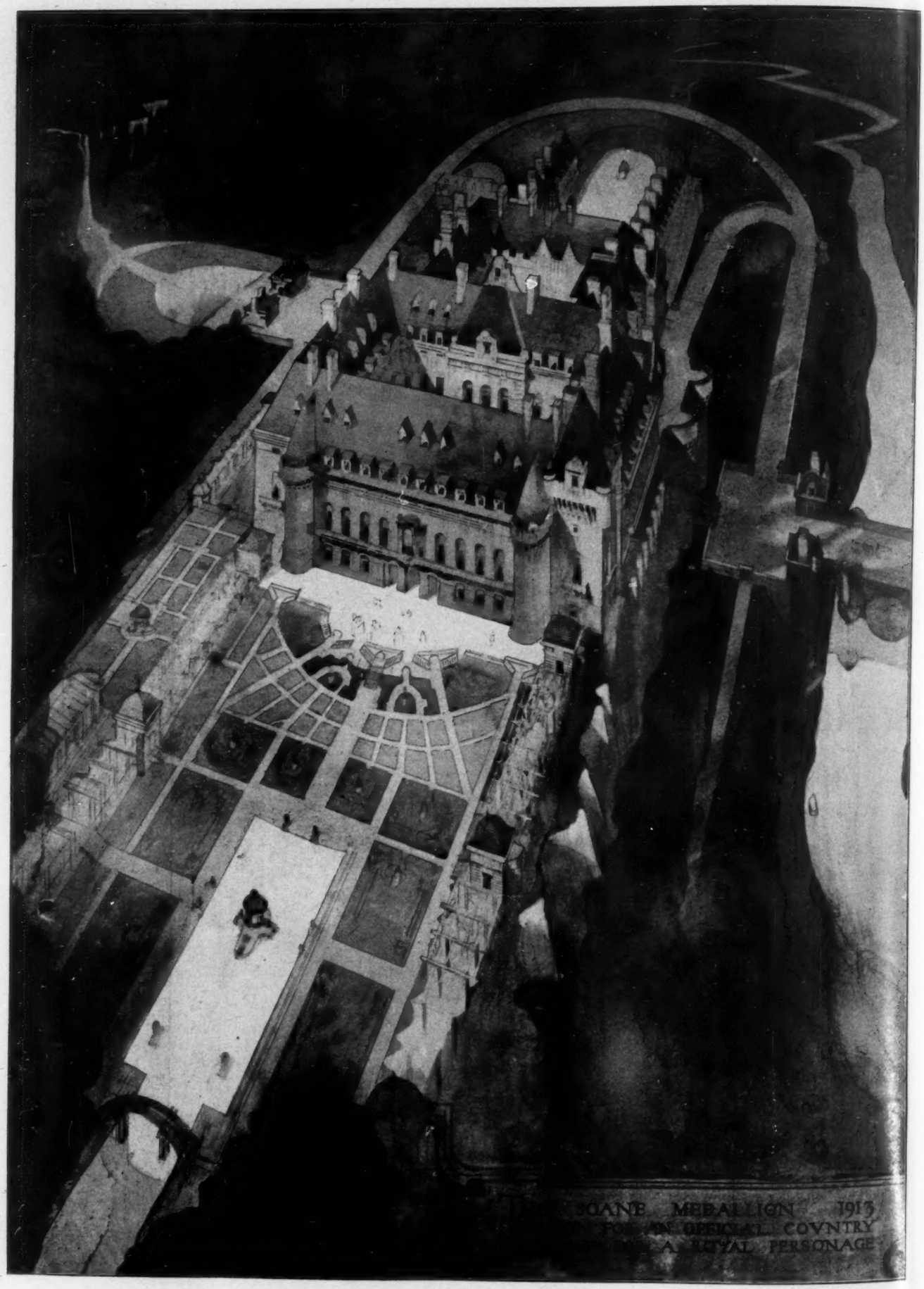
[*** A letter on "Wells Cathedral" has been held over until next week on account of want of space.—ED.]

FIFTY YEARS AGO.

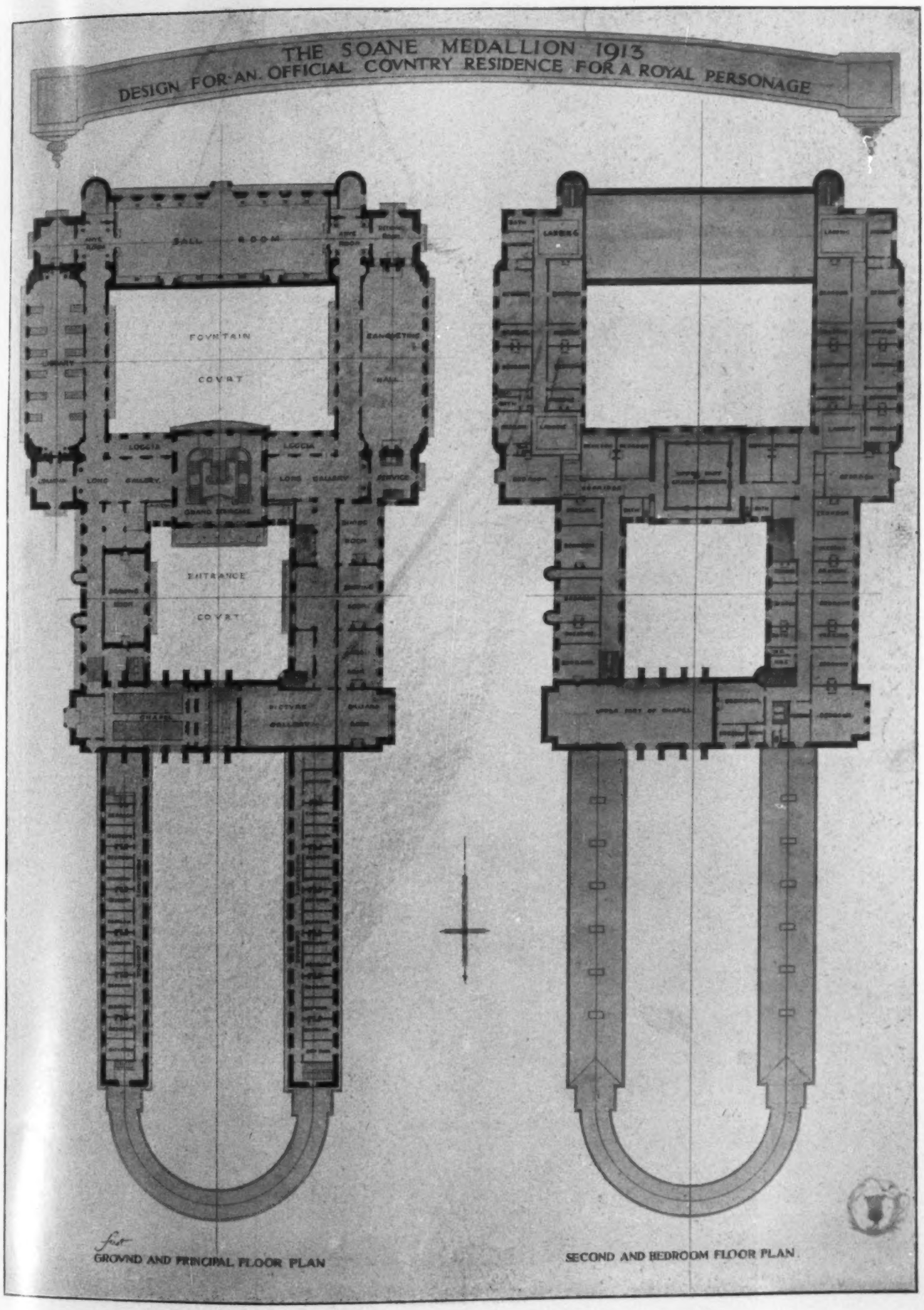
FROM an article in the *Builder* of February 6, 1864, on the "Violin, or Viol, in Ecclesiastical Sculpture":—

An instrument more capable of discoursing "celestial music" than the modern violin perhaps does not exist; but in unskilful hands not even the bagpipe can excel it in diabolical screeching and nerve-lacerating harshness. Whether it was from its celestial or from its diabolical capabilities, or both, that the rote or crowd, the viol, fyvele, or fythele, or other ancient form of instruments of the violin class, came to be sculptured, as the bagpipe itself was, on our ancient churches, it may now be hard to say: assuredly we must not take it for granted that because it was ecclesiastically used therefore it must have been regarded as exclusively a celestial and not also a diabolical symbol, for we have the devil himself not seldom "holding his own" place in such sculptures, and, indeed, it is fitting, in the nature of things, that the field of battle for the Evil Spirit should be precisely that on which the Good Spirit is at work; and probably this is the reason why devils, satyrical and diabolical faces, and other symbols of horror, should have been sculptured, as well as cherubim and angels, on our sacred edifices.

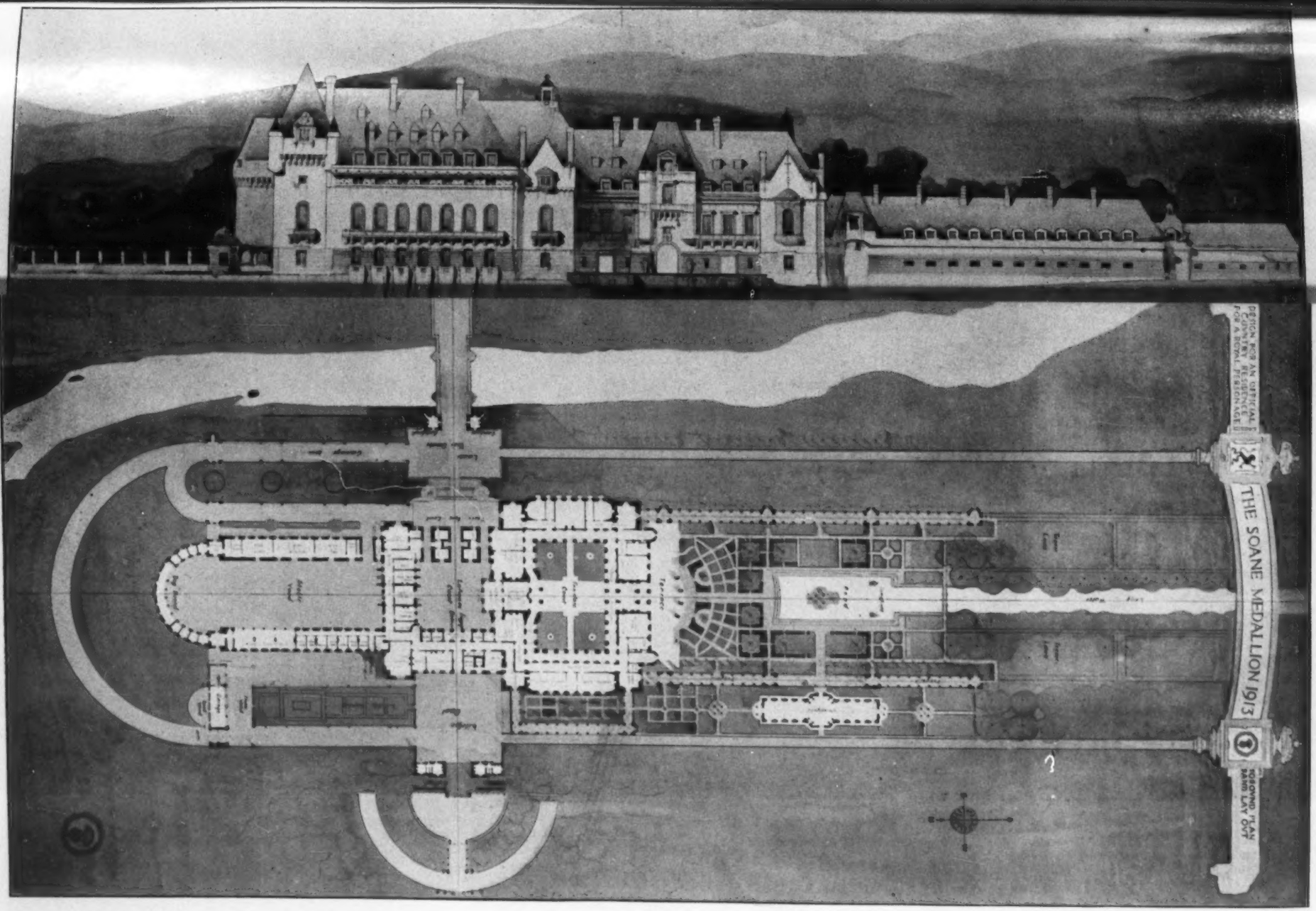
[*** This shows our articles covered a wide field even fifty years ago.—ED.]



R.I.B.A. SOANE MEDALLION.—AWARDED



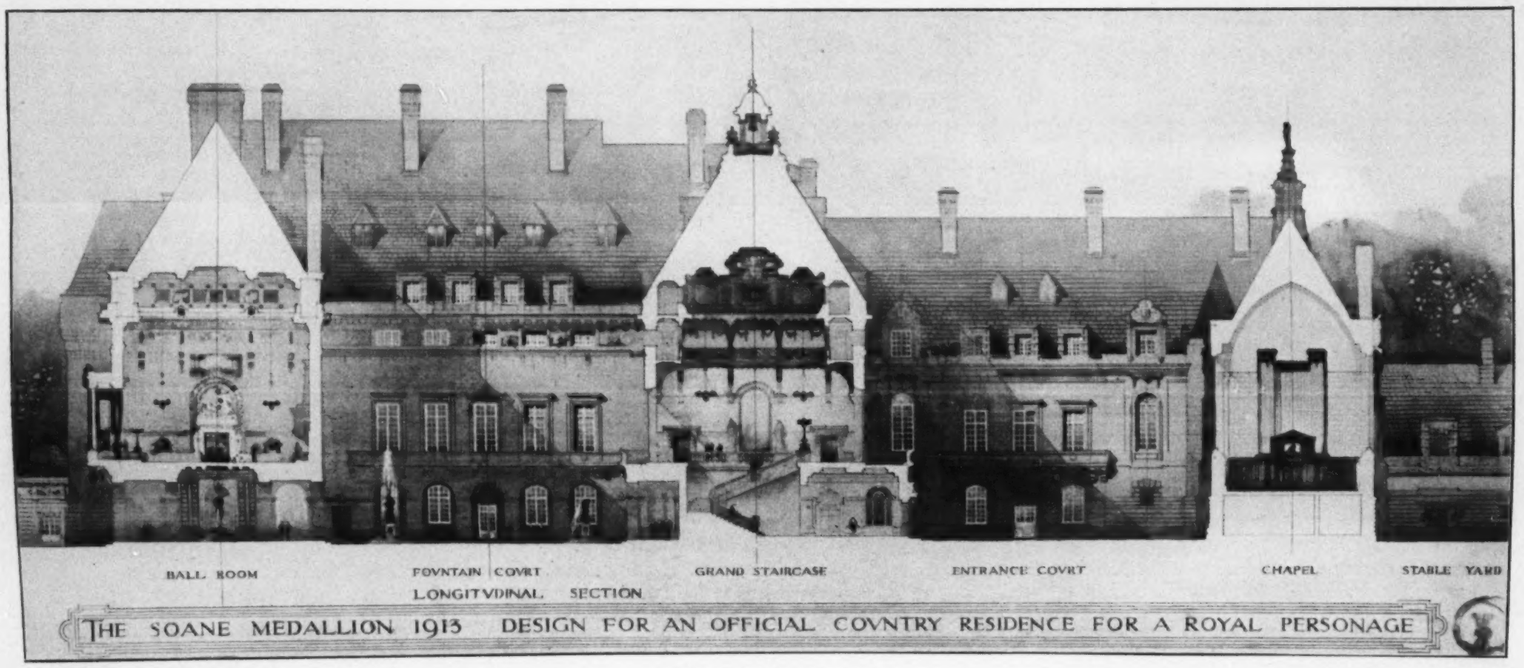
LLION.—ARDED TO MR. CYRIL A. FAREY.



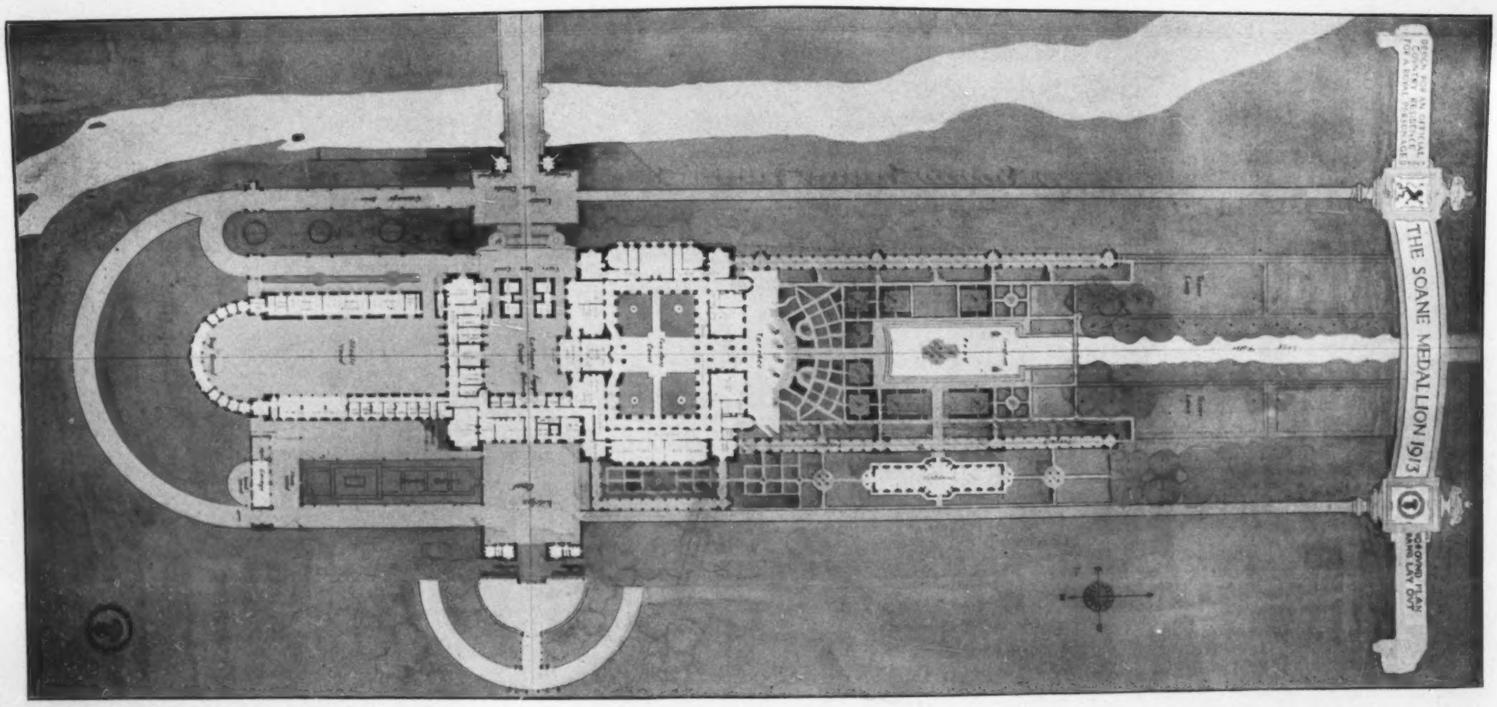
GROUND PLAN AND LAY-OUT.

R.I.B.A. SOANE MEDALLION.—Awarded to Mr. Cyril A. Farey.

EAST ELEVATION.



LONGITUDINAL SECTION.



GROUND PLAN AND LAY-OUT.

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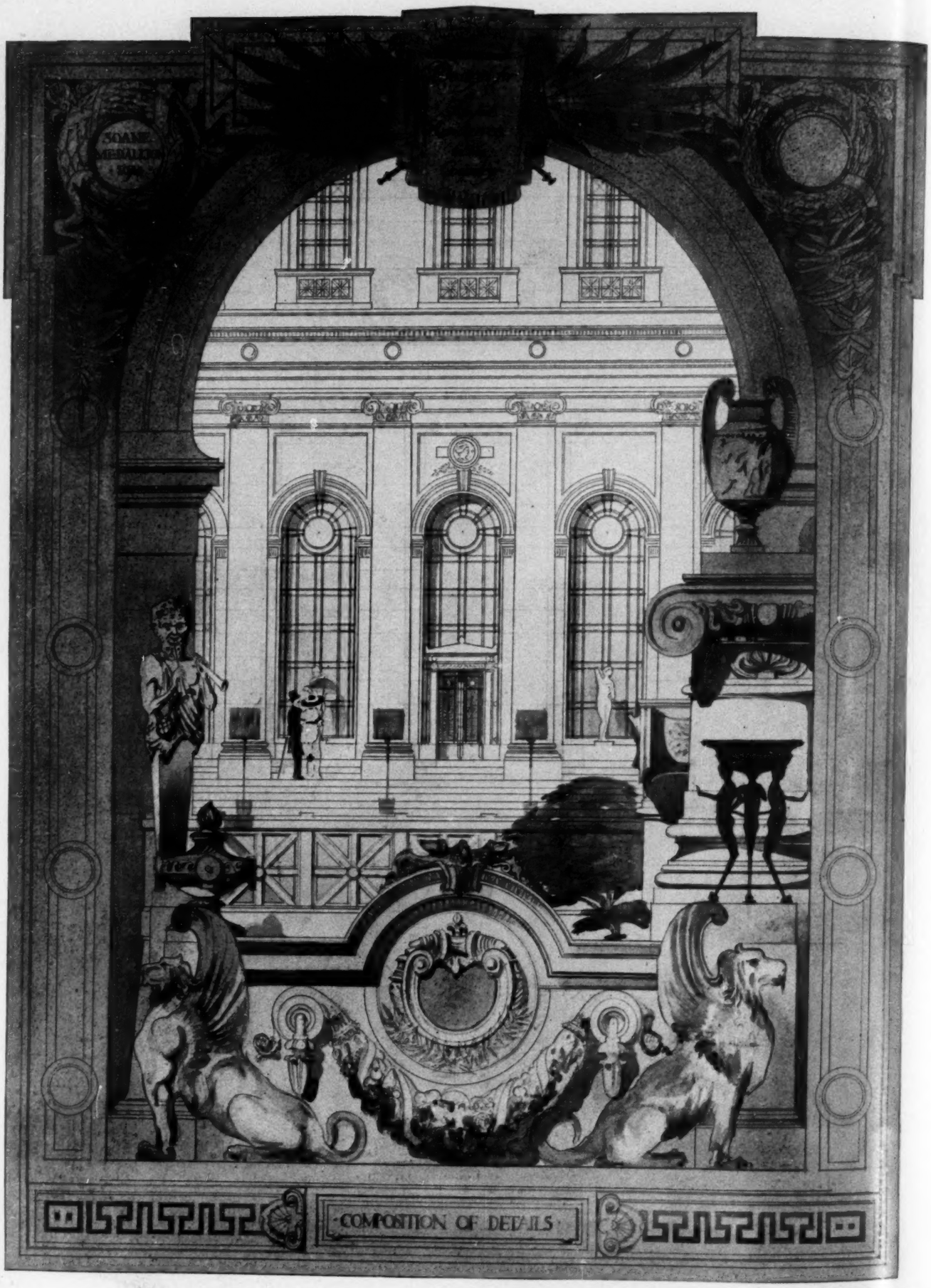
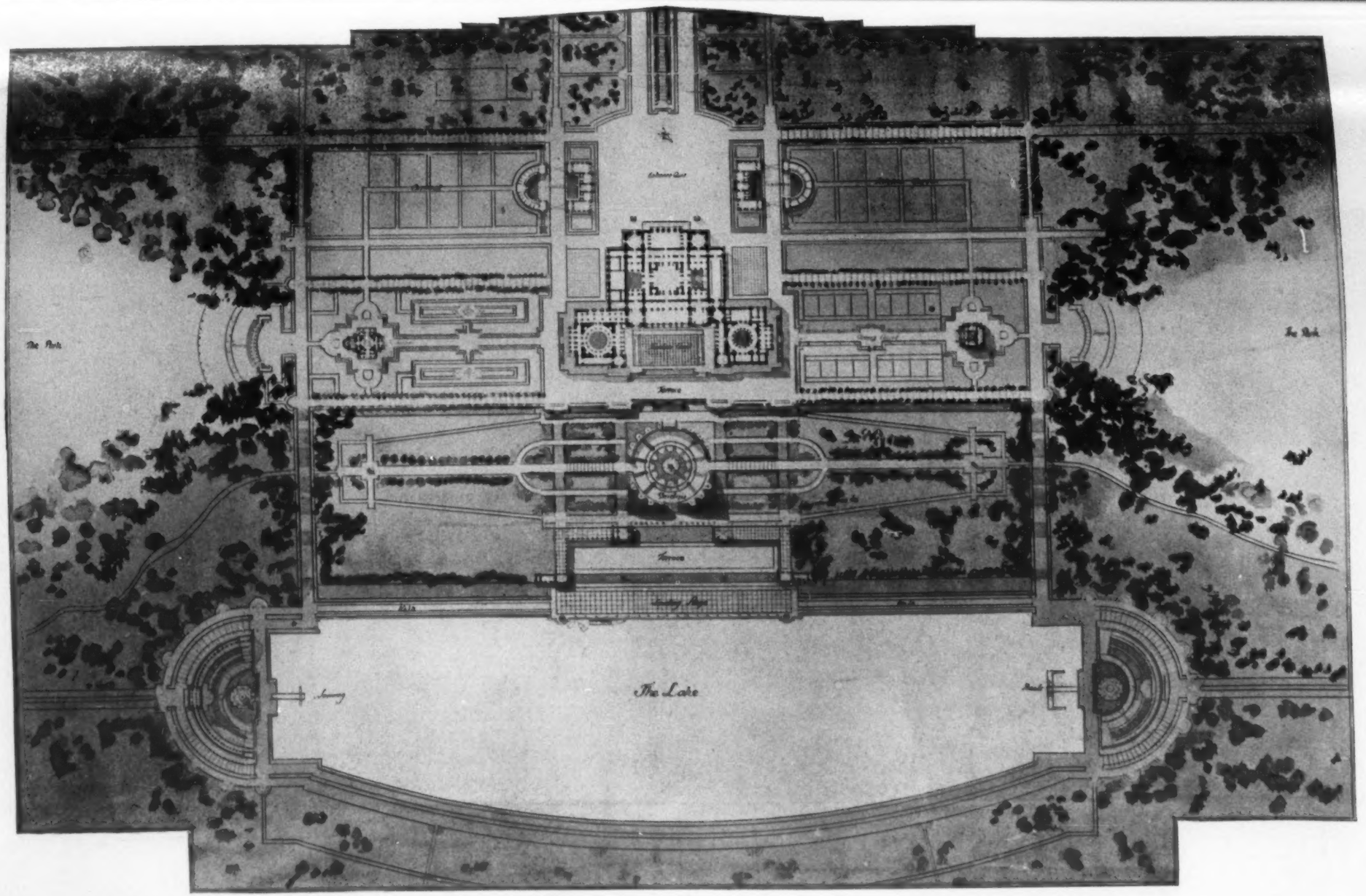


R.I.B.A. SOANE MEDALLION: CERTIFICATE OF HONOURABLE MENTION AND TEN GUINEAS.

By Mr. H. C. Bradshaw.

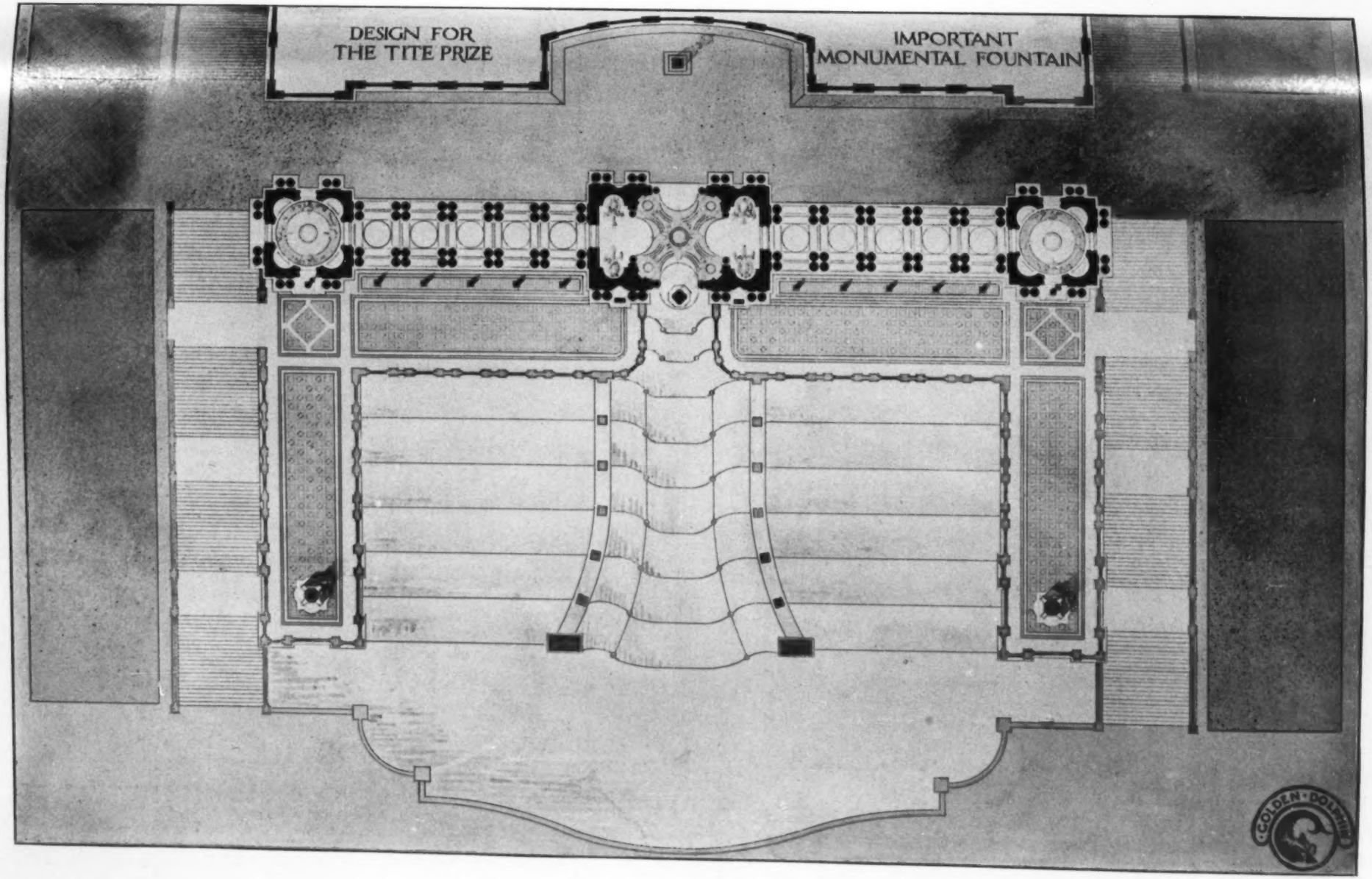


R.I.B.A. SOANE MEDALLION: CERTIFICATE OF HONOURABLE MENTION AND TEN GUINEAS.

By Mr. H. C. Bradshaw.

R.I.B.A. TITE PRIZE DESIGN (AN IMPORTANT MONUMENTAL FOUNTAIN).

By Mr. Trenwith Wills.



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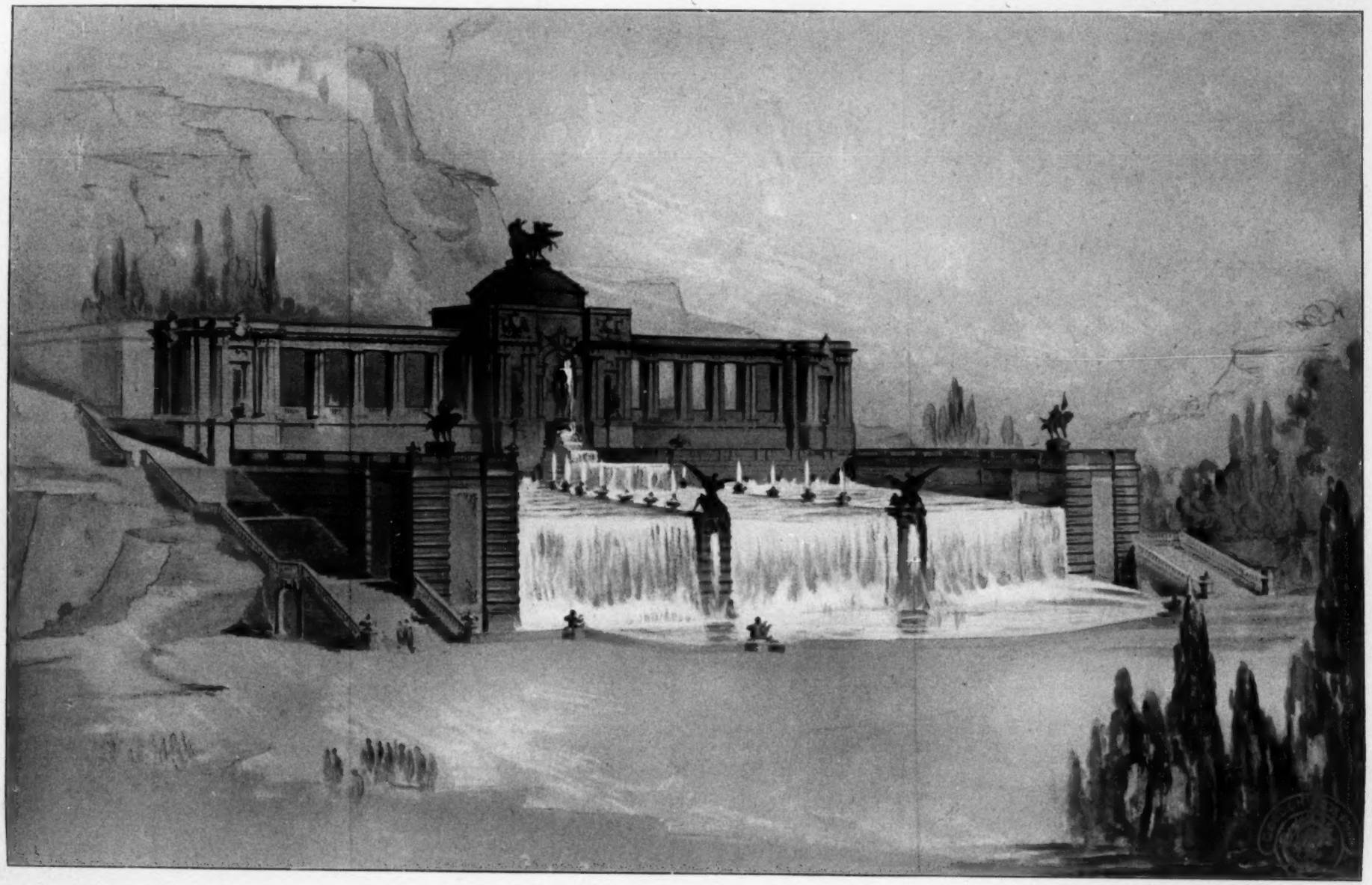

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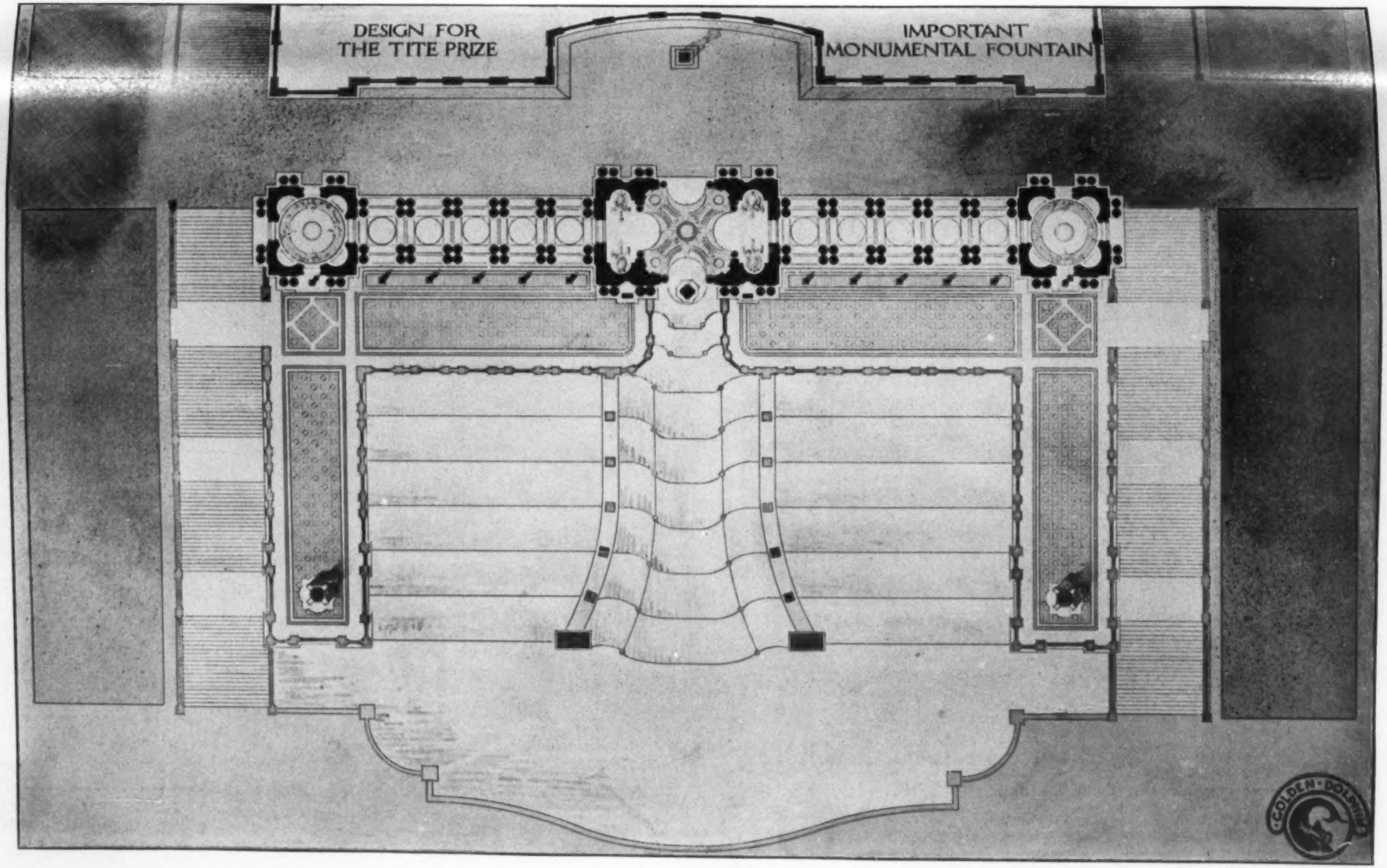


R.I.B.A. TITE PRIZE DESIGN.—By Mr. Trenwith Wills.

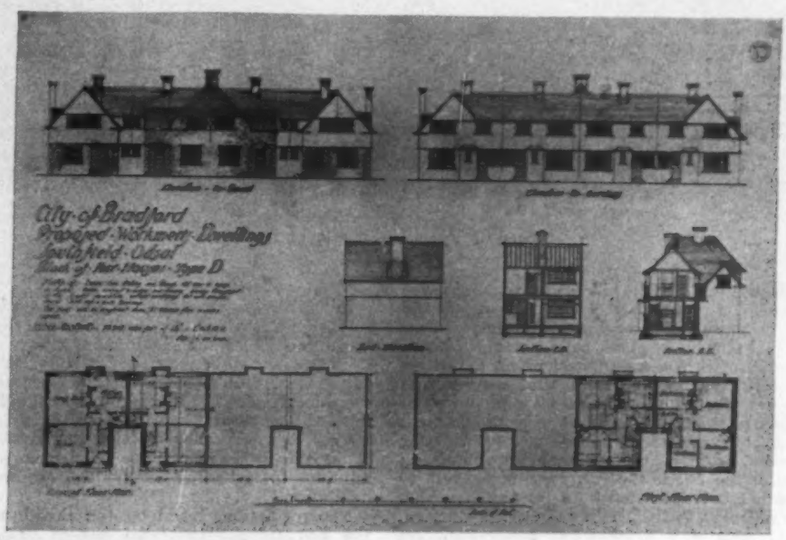
CIVIC DESIGN SECTION.

CORPORATION OF BRADFORD HOUSING AND TOWN PLANNING COMPETITION.

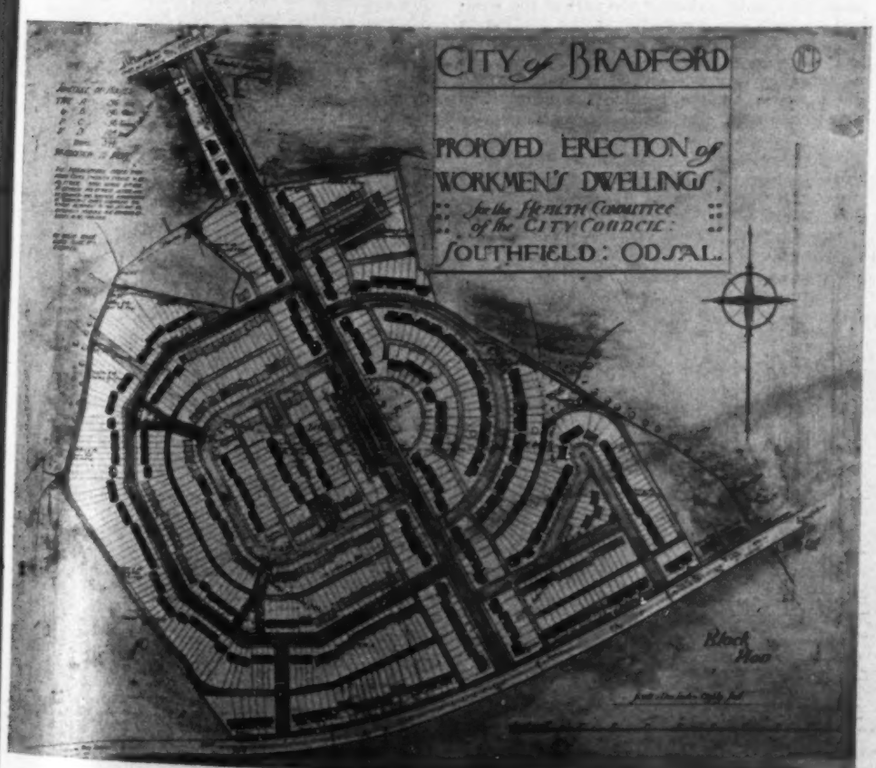
WE have several times expressed our doubt of the value of elaborate plans for large areas of suburban land, and particularly when these plans are arrived at by means of public competition. There have been one or two examples lately of towns offering premiums for plans of several thousand acres which are competed for by architects living hundreds of miles away, whose acquaintance with the locality is limited to a single visit. The assessor is frequently in exactly the same position as the competitor, and the result is a series of awards for paper plans which are destined to remain for ever in this tentative stage. Of even less likely utility is the competition dealing with an existing town which seeks to remodel itself by such superficial means. Far better for the above two purposes is it to appoint some town planning expert to work in conjunction with the local officials, and, as the result of careful study, develop plans of perhaps far less magnitude, but some likelihood of being made use of. The Americans, whom we are somewhat fond of accusing of slapdash hurry, can teach us how to approach the intricate problem of comprehensive town planning; several of their more recent reports, notably those on New Jersey and Newark, are chiefly remarkable for the systematic thoroughness of preliminary study which the authors have undertaken before suggesting improvements or new departures.

But there is a third case, where a public competition is of the utmost value, and this is where it is intended to lay out a definite area for a definite purpose, the work to be proceeded with at once. Of such a case was the competition recently promoted by the Corporation of Bradford for an estate of 50 acres, on which they intend to place some 600 workmen's houses. In such a case a town-planning competition approaches in definiteness very close to an architectural one; the whole site has to be plotted out and every building shown on its site, the scheme forming a working proposition which the Corporation could put in hand at once with the slight modifications which are inherent even in the most model of architectural competitions. Even a hilly site of such an extent can be grasped, with the help of a contoured plan, by a competitor unfamiliar with the neighbourhood, and an assessor need not be expected to lag behind the competitor in his aptitude to grasp the points of such a problem.

The notion of definiteness was carried even further in this competition by the requirement that the houses should be divided into four types costing £165, £182, £243, and £292 respectively, the numbers of each type required being specified and their positions to be shown on the plan. In one point only a vague latitude was allowed, and we are of opinion that definiteness in this also would have been also an advantage. Full freedom was given to competitors to select their own price per cubic foot. In view of the recent rise in prices and the great variation of local standards, we think that for small work of this sort some common basis should be furnished. For example, an architect who estimated his four types at 4½d. per cubic foot naturally produced a range of ampler houses than his fellow competitor who worked to 6d., and yet both were probably of precisely similar expensiveness of construction. Of course the assessor would quickly see through this difference, but a committee would be dangerously prone to favour the houses containing a larger cube which could apparently be built for the same sum as the smaller. With this sole cavil, we can heartily approve of the general way in which this competition has been conducted; and when we add that three satisfactory premiums were offered, namely, £300, £200, and £100, and Mr. Henry T. Hare, F.R.I.B.A., appointed assessor, it is not to be wondered at that the Corporation of Bradford had a wonderful response to their invitation to compete. Not only were a large number of designs sent in, fifty-eight, but many of the first architects in the country brought their wits to bear upon the problem, and some of the best designs for small domestic work that have recently appeared were produced.



Houses of Type D, by Mr. H. S. East.



First Premiated Site Plan, by Mr. H. S. East.

Indeed, it must be confessed that, in general, the architecture, in the form of the small houses, was on a higher plane than the site planning; it would seem, in fact, that several of the first-rate architects competing were only indifferent town planners. And this suggests that the architectural profession might make it their aim to study the question of site planning rather more thoroughly, it being a subject by no means simple and not quite falling into line with the usual architectural generalisations of classic and romantic art.

The three premiums were awarded by the assessor as follows: First to Mr. H. S. East, A.R.I.B.A.; second to Messrs. Geoffry Lucas & Arthur Lodge, AA.R.I.B.A., in conjunction with Mr. P. Badcock; third to Mr. Patrick Abercrombie, M.A. It is of course impossible to judge, in studying these awards, whether it was site planning or small-house design, or excellence in both, which determined the selection, but it is noteworthy that the site plans of the three premiated were remarkably dissimilar. The first aims at a Roman symmetry at all hazards, in spite of undulating contour and

Houses of Type A, by Mr. H. S. East.

indented outline; it will be seen that in two places the roads hit the boundary of the site so that either the neighbouring owners would have to be induced to build some houses in harmony with the Corporation, or the latter would have to buy more land to complete their scheme. The second plan produces an effort of symmetry on either side of the main axis, but the site is filled out by irregular excrescences, and the scheme is self-contained; again, the fall in the site from north-west to south-east is indicated by a general expansion or widening, so that, unlike the winning design, two ends of a symmetrical composition are not set out at different levels. The third plan, on the other hand, appears to allow the contours of the site to determine the general arrangement of the plan, reserving formality for comparatively small features. This design employs a considerable amount of curving roads, including that of the main boulevard.

In direct contradistinction to the site planning, the houses of the first premiated design are considerably the most picturesque and irregular, whereas those of the third premiated design are severe and regular to a degree, eschewing gables, except of a flat "pediment" sort; the second premiated design, which take a middle course, are perhaps the more satisfactory than either.

With regard to the house plans, it may be said at once that there is little possibility of originality for small houses at this time of day; they were most of them carefully worked out variations of fairly familiar types. Other good designs were sent in by Messrs. Lanchester & Rickards, Colcutt & Hamp, Gascoygne & Nott, Percy Houlton, Harvey & Wicks, and Gilbert Waterhouse.

The illustrations which we give in connection with this article are from blocks kindly lent by the Editor of the *Town Planning Review*.

THE HOUSING AND TOWN PLANNING ACT.

A MEMORANDUM, No. 3, has been issued by the Local Government Board relative to the operation of the Housing and Town Planning Act, 1909, and earlier Acts as amended. The object of this Memorandum is to bring up to date some of the information furnished in the Memoranda of November, 1911 and 1912 [Cd. 5953 and Cd. 6494], in which particulars were given of the operation of the Housing, Town Planning, etc., Act, 1909, and of results achieved under it and the Housing of the Working Classes Acts as amended by that Act.

Inspection of Houses.

In addition to the duties imposed upon local authorities by the Public Health Acts in regard to the inspection of their districts with a view to the abatement of nuisances, it is by sect. 17 of the Act of 1909 made the special duty of every local authority to cause to be made from time to time inspection of their district, with a view to ascertaining whether any dwelling-house therein is in a state so dangerous or injurious to health as to be unfit for human habitation.

The regulations made by the Board under the Act contemplated that houses or areas regarded as most in need of inspection should be dealt with first, and in many districts where this course has been adopted the result has been to secure the remedying of some of the worst conditions.

Where a contract has been made since the passing of the Act for letting for habitation a house or part of a house at a rent not exceeding (*a*) £40 in London, (*b*) £26 in provincial boroughs or urban districts with a population of 50,000, and (*c*) £16 elsewhere, and in regard to any such house there is under the section an implied undertaking on the part of the landlord to keep the house during the holding in all respects reasonably fit for human habitation. If it appears to the local authority that the undertaking is not complied with they may serve notice on the landlord requiring him to execute such specified works as they may think necessary to make the house in all respects reasonably fit for human habitation. Subject to a right of appeal to the Board, the landlord must carry out the works required, and, in default of his doing so, the local authority are empowered to execute the works at his expense.

The powers conferred by this section have been utilised very extensively by a number of local authorities, and it is satisfactory to note that the number of those authorities who have exercised the powers has increased substantially.

On a comprehensive view of the action of local authorities and of their sanitary officers, it must be admitted that very distinct progress has been made during the past year in the direction of securing that houses shall be fit for habitation.

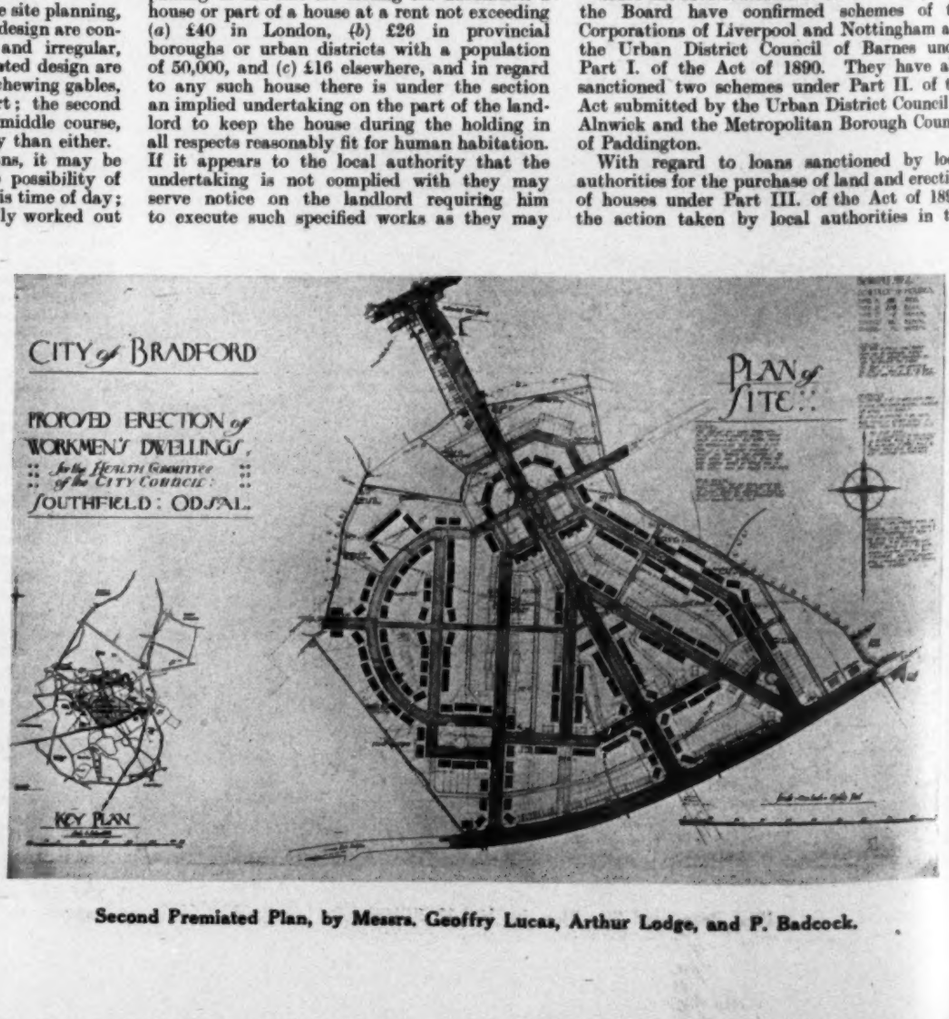
The sections dealing with closing and demolition orders provide for procedure, by way of closing and demolition orders, for dealing with dwelling-houses represented to the local authority to be "in a state so dangerous or injurious to health as to be unfit for human habitation." Action under them is not limited to houses coming within the rental and other limits of sect. 15.

Of the appeals to the Board under sects. 15, 17, and 18 of the Act, 211 out of 294 were not actually determined by the Board. In a few of these cases the appeals could not be proceeded with owing to some informality, but in the great majority of the cases they were formally abandoned by the appellants.

In their Memorandum, dated December 31, 1909, the Board stated in regard to sect. 15 of the Act as follows:—"It will be advisable for the Council where practicable to resort to the provisions of this section for securing that houses within the rental limits above referred to are put by the landlord into habitable repair, in preference to enforcing the powers conferred upon them by sects. 17 and 18 in regard to the closing and demolition of houses which become unfit for human habitation. The closing of houses involves the removal of tenants, and the natural sequel is demolition, resulting in a decreased amount of accommodation being available in the district. These objections are obviated where the case is dealt with under sect. 15."

Since the Memorandum of November 9, 1912, the Board have confirmed schemes of the Corporations of Liverpool and Nottingham and the Urban District Council of Barnes under Part I. of the Act of 1890. They have also sanctioned two schemes under Part II. of the Act submitted by the Urban District Council of Alnwick and the Metropolitan Borough Council of Paddington.

With regard to loans sanctioned by local authorities for the purchase of land and erection of houses under Part III. of the Act of 1890, the action taken by local authorities in the



Second Premiated Plan, by Messrs. Geoffry Lucas, Arthur Lodge, and P. Badcock.

provision of new houses since the passing of the Act of 1909 may be summarised as follows:—Loans to an amount exceeding £1,400,000 have been actually sanctioned by the Board, the schemes for which these loans were sanctioned making provision for the erection of 6,355 houses for the working classes. In addition there were, at the close of 1913, schemes under consideration by the Board providing for the erection of some 1,360 more houses at a cost of some £350,000. It will thus be seen that the loans actually sanctioned or under consideration at the end of 1913 exceeded £1,750,000 in amount, and that the schemes for which these loans have been sanctioned or applied for provide for the erection of more than 7,700 new houses by local authorities.

The figures show that during the last two years there has been a considerable increase in the activity of local authorities, and the improvement is particularly noticeable in the case of rural districts.

In the twenty years following the Housing Act of 1890 loans sanctioned to rural authorities amounted to less than £50,000. The total for the last two years is more than five times that amount, or £255,397, while the total for 1913 alone considerably exceeds the whole amount sanctioned in previous years since 1890.

Loans by Public Works Loan Commissioners to Companies, Public Utility Societies, and Private Persons for the Erection of Houses.

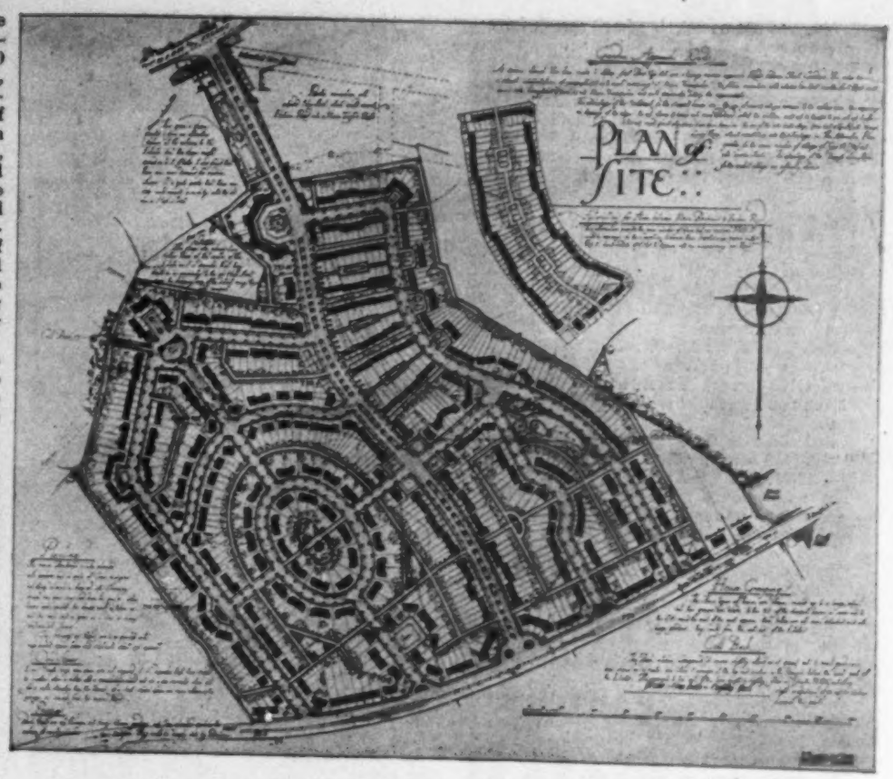
The foregoing particulars refer only to action by local authorities under Part III. of the Act of 1890, and do not represent the full extent to which the provisions of that part of that Act have been utilised for the provision of houses for the working classes. Under sect. 67 of that Act as amended by sect. 4 of the Act of 1909 the Public Works Loan Commissioners are empowered to advance on loan to certain companies, public utility societies or private persons "such money as may be required for the purpose of constructing or improving or of facilitating or encouraging the construction or improvement of dwellings for the working classes."

It appears from the reports of the Public Works Loan Commissioners that since the year 1890 they have advanced under the provisions referred to in England and Wales, loans of the aggregate amount of £1,317,894.

Under sect. 10 of the Act of 1909, a county council may complain to the Board that any local authority other than the council of a county borough have failed to exercise their powers under Part II. or Part III. of the Act of 1890, where they ought to have done so, and if the complaint is substantiated the Board can require the default to be remedied. The only cases in which the Board have received formal complaints from county councils under the section related to a district in the county of Durham and a district in the county of Monmouth.

Under the Board's order prescribing the duties of county medical officers of health, every such medical officer must include in his annual report a section on the administration of the Housing Acts within the county, and copies of the annual reports are received and considered by the Board. Those received during the present year show considerable improvement in regard to their treatment of the housing question and contain useful information on the subject. They also furnish testimony to the great value of systematic inspection of houses under sect. 17 of the Act of 1909 and the Board's regulations, and to the good results already achieved from action by the local authorities under the Act.

The Board have received and considered a number of complaints under sect. 10 of the Act of 1909 as to local authorities not exercising their powers under Part II. or Part III. of the Act of 1890. The Board have found that the circumstances of several of the cases were such as to justify the making of orders of default against the local authorities concerned, but except in one case they have not found it necessary to proceed to that extremity. The authorities have usually shown themselves willing to comply with the Board's requirements in these cases. In the case referred to, however, the circumstances were such that the Board considered it necessary to make an order of default. Many complaints of an informal character also reach the Board, and they communicate with the local authorities thereon, and in some cases where no complaints have been received the Board have thought it desirable, by reason of the information in their possession, to undertake, by their housing and medical inspectors, independent investigations of the housing conditions with a view to ascertaining facts and securing that improvements shall be made.



Bradford Housing Scheme: Third Premiated Plan, by Mr. Patrick Abercrombie.

The Board have also communicated with a large number of local authorities from time to time with a view to securing proper attention on their part to their statutory duties in relation to insanitary property, overcrowding, and the provision of further housing accommodation. Much good has resulted from the Board's action in regard to these matters, and the increased activity indicated in the previous portions of this Memorandum, though due largely to the willingness and desire of local authorities to effect improvements in regard to housing conditions, may to a material extent be directly traced to the administrative pressure of the Board.

In the Board's Annual Report for 1912–13 [Part II.—Housing and Town Planning. Cd. 6981] the subject of town planning was dealt with in considerable detail, and it will suffice to bring up to date in a brief form the information in the possession of the Board as to the progress made by local authorities in regard to the preparation of town-planning schemes under the Act of 1909.

The following table indicates the general position at December 31, 1913:—

The schemes finally approved by the Board are:—

Birmingham Corporation.—The Quinton, Harborne, and Edgbaston Town-Planning Scheme relating to an area of about 2,320 acres in the city.

Birmingham Corporation.—The East Birmingham Town-Planning Scheme relating to an area of about 1,442 acres in Aston, in the eastern part of the city.

The other schemes prepared by local authorities and submitted to the Board for approval are:—

Rochdale Corporation.—The Rochdale Town-Planning Scheme (Marland) relating to an area of about 43 acres in the borough.

Ruislip-Northwood Urban District Council.—The Ruislip-Northwood Town-Planning Scheme relating to an area of about 5,906 acres in the Urban District and in the parish of Rickmansworth (rural) in the rural district of Watford.

North Bromsgrove Urban District Council.—The Rubery Town-Planning Scheme relating to an area of about 554 acres in the urban district.

The other cases in which the Board have authorised local authorities to prepare or adopt schemes are:—

Town Councils (20) (27 schemes).—Birmingham (a third area of 3,173 acres), Blackburn (887 acres), Bournemouth (two areas of 202 and 223 acres), Bridlington (2,730 acres), Chesterfield (64 acres), Halifax (three areas of

SUMMARY OF TOWN-PLANNING SCHEMES PROPOSED AND OF OTHER CASES IN WHICH THE PREPARATION OF SCHEMES HAS BEEN UNDER CONSIDERATION BY LOCAL AUTHORITIES.

Stage Reached.	Number of Schemes.	Number of Local Authorities.	Acreage of Areas dealt with.
Schemes finally approved by the Board	2	1	3,762
Other schemes prepared by local authorities and submitted to the Board for approval	3	3	6,303
Schemes authorised by the Board to be prepared or adopted by local authorities	47	37	70,900
Applications for authority to prepare schemes under the consideration of the Board	14	14	29,761
Total	66	50 Separate Local Authorities.	110,926
Other cases in which the Board have information that the preliminary notices have been given with a view to applications being made to the Board for authority to prepare schemes	—	17	—
Other cases in which local authorities are known to the Board to have had the matter under consideration	—	119	—
Number of separate local authorities included under all headings in this Table	—	175	—

877, 749, and 655 acres), Leeds (6 acres), Liverpool (two areas of 1,177 and 88 acres), Luton (4,266 acres), Middleton (300 acres; authority to adopt a scheme proposed by owners), Newcastle-upon-Tyne (53 acres), Richmond (514 acres), Scarborough (40 acres), Sheffield (four areas of 1,619, 624, 488, and 97 acres), Southport (2,848 acres), Stoke-upon-Trent (83 acres), Sutton Coldfield (6,378 acres), Stockport (1,044 acres), Wallasey (1,170 acres), Warrington (1,475 acres).

Urban District Councils (15) (15 schemes).—Allerton* (1,204 acres), Carshalton (2,320 acres), Cheadle and Gatley (471 acres), Ellesmere Port and Whitby (3,539 acres), Finchley (1,044 acres), Ham (976 acres), Hanwell (198 acres), Hazel Grove and Bramhall (1,728 acres), Little Woolton* (420 acres), Much Woolton* (993 acres), Newton-in-Makerfield (2,518 acres), Oldbury (1,763 acres), Prestwich (1,800 acres), Twickenham (1,860 acres), Walthamstow (1,530 acres).

Rural District Councils (2) (5 schemes).—Hunslet (410 acres), Wirral (four areas of 5,742, 4,243, 3,431, and 2,886 acres).

The applications for authority to prepare schemes now under the consideration of the Board are from the undermentioned local authorities in respect of the areas stated :—

Town Councils (4).—Manchester (3,252 acres), Newcastle-upon-Tyne (1,540 acres), Wallasey (6 acres), Wrexham (823 acres).

Urban District Councils (4).—Beckenham (1,816 acres), Harrow-on-the-Hill (1,720 acres), Hendon (5,195 acres), Oldbury (131 acres).

Rural District Councils (6).—Doncaster (5,170 acres), Halesowen (800 acres), Honiton (325 acres), Rotherham (1,112 acres), Wirral (3,710 acres), Wrexham (4,161 acres).

The other cases in which the Board have information that the preliminary notices have been given with a view to applications being made to the Board for authority to prepare schemes are :—

Town Councils (8).—Chesterfield, Manchester, Mansfield, Middlesbrough, Newport (Mon.), Shrewsbury, Tynemouth, Wallsend.

Urban District Councils (9).—Acton, Barnet, Cheadle and Gatley, Heston and Isleworth, Neston and Parkgate, Sidmouth, Surbiton, Willesden, and Wood Green.

It is probable that notices have been given in other cases of which definite information has not reached the Board.

As regards the other cases in which it is known to the Board that local authorities have had the matter under consideration, the information in the Board's possession would seem to indicate that the consideration of the matter by the local authorities in some of the cases has reached a stage practically equivalent to a decision to proceed with a scheme.

The details given above show that the movement in favour of town planning has made considerable progress amongst local authorities since the Memorandum of November, 1912, was issued.

THE TOWN PLANNING INSTITUTE :

INAUGURAL DINNER.

THE inaugural dinner of the Town Planning Institute was held on Friday last week in the Connaught Rooms, Kingsway, W.C., Sir Aston Webb, R.A., F.R.I.B.A., presiding. The Institute has been formed "to advance the study of town planning and civic design, to promote the artistic and scientific development of towns and cities, and to secure the association of those engaged or interested in the practice of town planning."

The guest of the evening was the Right Hon. John Burns, M.P., President of the Local Government Board, and among those present, including many ladies, were :—

E. R. Abbott, Clerk to Ruislip-Northwood U.D.C.
Patrick Abercrombie
Thomas Adams, F.S.I.
Professor S. D. Adshead
H. R. Aldridge
Adrian Berrington
J. S. Birkett, M.A.
A. W. E. Bullmore, A.M.Inst.C.E.
Lawrence Chubb
R. Collins, Enfield U.D.C.
W. R. Collins, Enfield U.D.C.
J. W. Cockrill, M.Inst.C.E., President I.M. and C.E.
C. M. Crickmer, F.R.I.B.A.
E. G. Culpin
W. R. Davidge, F.S.I., A.M.Inst.C.E.
W. E. Davis
J. A. E. Dickinson, I.S.O.
Professor Dixon
F. M. Elgood, F.S.I.
Professor Patrick Geddes
Sir George Gibb
Sir Laurence Gomme
F. G. Hayward, F.S.I.
Colonel Hellard, C.B.
G. W. Holmes, A.M.Inst.C.E.
P. Morley Horder
Ebenezer Howard
C. J. Jenkin, M.Inst.C.E.
Noel T. Kershaw, C.B.
F. O. Kirby, M.Sc., Borough Surveyor, Doncaster
Brook Kitchin, F.R.I.B.A.
C. P. Lovelock, Clerk to Carshalton U.D.C.
Geoffrey Lucas, F.R.I.B.A.
A. MacMorran, K.C.
De Courcey Meade, M.Inst.C.E.
Sir Horace Munro, K.C.B.
Barry Parker
Bruce Penny, Town Clerk
G. L. Pepler, F.S.I.
J. S. Pickering, M.Inst.C.E., President-Elect, I.M. and C.E.
W. B. Pindar, Clerk to Hunslett R.D.C.
P. T. Runton, F.R.I.B.A.
R. W. Reay-Nadin, Town Clerk, Sutton Coldfield
E. P. Richards, M.Inst.C.E., etc.
W. Smith, Clerk to Luton R.C.
A. Soutar, Licentiate R.I.B.A.
A. J. Soutar, Licentiate R.I.B.A.
Sir Alexander Stenning, P.P.S.I.
H. E. Stilgoe, M.Inst.C.E.
Capt. George Swinton
Raymond Unwin, F.R.I.B.A.
Leslie Vigers, P.P.S.I.
The Lord Bishop of Wakefield
W. L. Weaver, Hon. A.R.I.B.A.
G. W. Widdowson

* In these cases the town-planning schemes will be prepared by the Corporation of Liverpool, the urban districts of Allerton, Little Woolton, and Much Woolton having been incorporated with the City of Liverpool as from November 9 last.

The loyal toast having been proposed by the Chairman (who remarked that they would have noticed an account in the papers that morning of the improvements which were taking place in Kensington, and which would, he thought, enable them to consider his Majesty as a town planner),

Sir Aston Webb

proposed the toast of "Our Guest," the Right Hon. John Burns, M.P., whom he described as the father of town planning. It was to Mr. Burns they owed the foundation of the Institute, composed as it was of engineers, surveyors, architects, lawyers, and administrators, all of whom played a great part in this great town-planning movement, which was spreading all over the country. In a speech a little while ago he (the speaker) suggested that a day would come when salmon would be found in the Thames. He had recently been informed that in the days of Queen Elizabeth it was a common clause in the indentures of apprentices that they should not be asked to eat salmon from the Wandle more than three days a week. Surely they ought to be able to bring London up to the standard that it reached in the days of Elizabeth. He congratulated Mr. Burns on the success of the Act, and he believed it would be even a greater success as it was more brought into use and its principles and mode of procedure more understood. They hoped that our cities in the future would be properly organised, planned, and laid out, and not given over to the jerry-builder and property owner to grow up without method, orderless, and shapeless; but that they would have somebody to plan them and give them space, dignity, order, and all that would make them worthy to be called cities.

The Right Hon. John Burns,

in reply, said that the object of the Institute was to advance the study of town planning and civic design in the widest possible sense, and with that end in view it was determined to include architects, surveyors, engineers, town-planners, and artists, and idealists and practical men (frequently over one hundred years the idealists were the only practical men), and to make the Institute the common centre for mutual work and joint action in promoting the artistic as well as the scientific and engineering development of towns. He agreed with the Futurist to this extent that a nation could not live on its past beauties, and it was their business to see that they put into the organisation of their city life the same forethought, the same order, the same design, the same skill, and the same labour, conscientiously applied, that the ancients were able to do. In the four years since the Town Planning Act was passed 200 local authorities, mainly large towns and cities, had moved definitely in the matter of town planning. Fifty with a population of over 5,000,000, not including London, had so far applied to the Local Government Board for authority to prepare schemes. In two cases schemes had been finally approved, and three were before the Board for final approval. Other cities had been authorised to prepare schemes, and about 150 cities were at work on the preliminary stages. They should not judge the Act by the small number of schemes which had been finally approved, as it was largely desirable that the whole country should first undergo a preliminary survey. No other country in the world was making such general and rapid progress, and he was being asked for advice and information from all parts of the world. Having been the last to move, we were now taking the first place. Some people thought that the time had arrived for compulsory town planning, but for the moment it was neither practicable nor desirable, though possibly in time it might be resorted to. He did not think that an amendment of the Act was possible perhaps for three or four years, but the experience they had had would enable them to shorten considerably the procedure. He trusted that shortly simplified and improved regulations and procedure would be submitted to them by means of which that movement would make accelerated progress. He regretted that there had of late been a change in Western London which was not for the benefit of that portion of the city. The workman considered the West-end to be his civic front parlour, but of late there had been a tendency to convert residential houses into motor-car emporiums to the detriment of the neighbourhood and to the detriment of the property itself twenty-five or fifty years hence. He also objected to the fact that a power company could dump a power-station at Chelsea when it ought to be at Gravesend, and that a Hovis flour mill could be put at the foot of Vauxhall Bridge when it ought to have been at Blackwall or the Isle of Dogs. Every temporary gain for shops and sale-rooms of this description was degrading some of our finest streets, and it was not necessary. He liked cities to be cut up into quarters. Long Acre was for centuries the home of the carriage-makers' industry. When the horse gave way to the motor there was no reason, as far as he could see, why Long Acre should not have been the centre of the motor-carriage industry. He regarded Princes-street, Edinburgh, as perhaps the noblest street in the world, and yet three cinema picture-palaces had been allowed to cut themselves in like three gashes, and he thought there should be some power to prevent vandalisation of fine streets and cities. There were also too many empty shops in towns and cities; and if there had been a Town Planning Act in the past this would not have been so.

Sir Laurence Gomme, F.S.A.,

then proposed the toast of "The Town Planning Institute," coupled with the names of Mr. Raymond Unwin, F.R.I.B.A., and Mr. J. W. Cockrill, M.Inst.C.E., and in doing so he said there was one Act dealing with town planning which preceded the Town Planning Act, *i.e.*, the Act passed by Charles II. for the rebuilding of London. It was a beautiful Act to read, and it was delightful to know that it was carried out.

Mr. Raymond Unwin,

in reply, said they owed the formation of the Institute very largely to Mr. Adams. The Institute was one of the signs of the revival of civics and the civic spirit. They were determined to make the Act go as far as it would carry them and do as much as it was capable of.

Mr. Cockrill said the Institute had met with a most encouraging reception.

The toast of "The Chairman" was then proposed by Sir Alexander Stenning, P.P.S.I., and acknowledged by Sir Aston Webb, R.A.

CIVIC DESIGN NOTE.

Garden Cities and Town Planning Association.

THE annual meeting of the Garden Cities and Town Planning Association will take place, by kind permission of the Worshipful Company of Carpenters, at the Carpenters' Hall, Throgmorton-street, on Monday, February 16, at 5 p.m. Mr. Cecil Harmsworth, M.P. (Chairman of Council), will preside. Among the speakers will be Lord Robert Cecil, M.P. It is proposed to deal with the economic aspect of the true garden city scheme, and a new feature will be introduced in a brief lantern lecture illustrating the position of the garden city movement at the present time. At 4 p.m. Mr. and Mrs. Cecil Harmsworth will receive members and friends, and tea will be served, whilst the business meeting starts at 4.30 p.m. Cards of invitation to the meeting can be obtained from the Secretary, 3, Gray's Inn-place, Gray's Inn, W.C.

THE BUILDING TRADE.

COMBINATION *v.* COMPETITION.—III.

WHEN a combine has reached a prosperous stage in its development the conservative element in human nature is apt to assert itself in those who are guiding its operations, and a tendency to stereotyped methods prevail, progress and invention cease, and the main idea seems to be to maintain a steady profit by artificially restricting supplies instead of attaining such a result by constantly seeking to improve methods and increase demand with a view to a larger turnover and lower prices.

It is this conservative tendency which probably initiates that oppressive stage in their development when governments, in the public interest, have to enact or put into operation laws against trusts and combines.

That stage has been reached in the United States, and in the near future may be reached in Germany and elsewhere.

The question is whether this period of combines is to be replaced by another period of unrestricted competition, and the latter bring in another period of combines, and so on, or whether this modern age can find some method of regulation which shall conserve the best features of both systems and hold them so balanced that excesses in either direction may be restrained or prevented. Such a result can only be brought about by increasing the amount of public control of the conduct of business in some or all of the following directions:—As regards the relations between employer and employed; agreements relating to conditions of employment might be more closely supervised, a suitable living wage insisted upon; such agreements to be binding on all alike in the trades to which they appertain.

As regards the relations between buyer and seller, equitable conditions of competition based upon equitable minimum prices and equitable conditions of sale and contract might remove the worst evils of unrestricted competition in price.

As regards the acquirement and control of sources of supply of raw or other materials, equitable conditions governing their exploitation, guarding against restriction of output or inflation of price and limiting the greediness of those in charge by insisting upon all profits over and above a fixed maximum going in reduction of the price to the consumer, or partly in that and partly in increased wages. As regards the encouragement and assistance of invention, something might be done by or through the State to test inventions on a sufficient scale to prove their worth or otherwise. Inventions are a matter of national concern, since a great invention may greatly influence the future of a people. The steam-engine did, for example In present circumstances inventions have great difficulty in securing opportunities of development, and inventors rarely derive any benefit themselves from the exploitation of them. In short, competition should be restrained when it reduces prices to a point at which it either impairs the quality of the product or does not leave the seller a living profit on his transactions; combination should be restrained when it forces prices up beyond a point at which there is a living profit for those who produce the goods of the combine or reduces the output to effect a similar result.

So long as competition is mainly in the direction of the development of the forces and resources of Nature, and as little as possible a mere competition of price, it is a race-developing factor of the highest importance.

So far as combination is the expression of solidarity of feeling and interest in those combined, it is a good thing. Our great nation is an example of it. But solidarity of feeling and interest needs to permeate business relations also until a combine is an expression of identity of feeling and interest between the buyers and sellers concerned with it and in it.

All the principles referred to in these remarks already are recognised to a certain extent. For example, Parliament in granting charters to railways fixes a maximum schedule of rates, any advance on which has to be approved by Parliament after inquiry. In the case of certain gas companies the profit earned by the shareholders may not exceed 10 per cent.; all profit beyond that has to go in reduction of the price of gas. Parliament has recognised the principle of the minimum wage in the Coal Miners' Bill which settled the great strike. The same principle is recognised in the fees established for lawyers and other professional men. Inventions must be exploited or the patents granted in respect of them may be withdrawn. Monopolies of sources of supply are attacked by legislation calculated to stimulate the owners to put land, etc., on the market for development. The recently established Commission for encouraging the development of our national resources is a further recognition of that solidarity of feeling and interest which makes the welfare of its meanest citizen part of the business of every great modern nation.

That the feeling of solidarity between man and man is a growing force of worldwide importance may be seen in the present labour unrest movement, which is more than anything an outburst of class consciousness demanding improved conditions of life and work.

There is ground, therefore, for hoping that ere long the relations between combination and competition may be reconciled so that in the future both may strive harmoniously in the direction of substituting mutual service for mutual exploitation and truly complement one another for the welfare and advancement of mankind.

THE OBSERVANCE OF WORKING RULE AGREEMENTS.

THE dispute in the London building trade, over a failure on the part of individual members of trade unions to observe certain conditions laid down in the working rule agreements entered into lately on their behalf by their executive committees, is likely to lead to some drastic revision of the present methods of making and confirming agreements between unincorporated bodies, such as the workmen's unions and the employers' associations.

It is true that a section of the operatives would like to do away with all agreements with employers' associations, but that policy is not likely to commend itself to the majority of their fellows, because in times of bad trade experience shows that it is impossible to maintain a standard rate of wages where the employers are not bound by agreement to observe it. So it is to be expected that the outcome of the present conflict will be fresh agreements embodying more stringent guarantees for their fulfilment than have hitherto been thought necessary. The question is, or will be, what kind of adequate guarantees can be given?

In employers' associations the guarantee consists of the power of expulsion from the association for refusal to conform to agreements duly entered into on behalf of its members by the executive, and hitherto this has been found sufficient. When negotiations for an agreement are in contemplation a general meeting usually confers plenary powers within wide limits upon the executive to negotiate the new treaty, and it is usually only necessary for a negotiating committee to refer important variations in the original instructions back to such a meeting before ratification of the eventual agreement by the executive.

In the case of the unions more limited powers are confided to the delegates, and, in theory at least, if not always in practice, the eventual agreement must be ratified by the vote of a general meeting.

Under the influence of powerful feelings, such as now pervade the rank and file of the unions, conditions of agreement which have been hitherto acquiesced in are repudiated, and it is evident that many individual members no longer feel themselves bound, or perhaps have never felt themselves bound, by some of the terms entered into by their executives. This points to some defect in the methods adopted within the unions to obtain a proper mandate from the members for such agreements.

It is not hard to understand how such a failure arises. Suppose a union puts forward a claim for revised conditions of working upon a mandate obtained in general meeting, however clear that mandate may have been the proposals of the executive are bound to undergo modification in the course of negotiations with the employers, so that confirmation of the ultimate result is required. If that confirmation comes from a general meeting it may or may not represent the assent of a majority of the members of the union, since there may be many absent; if it comes from a vote by card of the members many abstain from voting.

Then, again, a union is a fluctuating body; members die or fall away, new members come in, and so in time a mandate loses force, and appears less binding to those individuals who were not original parties to it.

Under the influence of the present militant feeling among members of the unions conditions of employment which require them to work with non-unionists seem to them an infringement of personal liberty far beyond any mandate they ever gave to their executives.

Now, the obvious reflection on this state of things, which places the union executives in a false position, is that if the unions feel strong enough to decline to work with non-union men they should refuse to bind themselves by agreement to work with them. If they do not feel strong enough for that they should loyally carry out their agreement to work with them until such time as they do feel strong enough to resume their liberty of action by cancelling it, and that the executive should at all times have at its back a clear mandate from the members for the pursuance of such a policy. To enable this to be done it would seem necessary that when an agreement is entered into by a union its executive should insist upon its being ratified by the individual signature of every member at the time, and require every new member similarly to signify his adhesion to existing agreements. This process would bring home to every member his personal responsibility for the engagements of his union. Power to impose penalties for breach of these engagements should be vested in the executive.

A suggestion has been put forward by the employers that agreements between the two bodies should be secured by a financial guarantee. There might not be any great difficulty in setting up such a guarantee fund if both parties were willing, but its administration might show that it was not so adequate a protection as at first sight it would appear to be, and many employers believe that, as a means for securing the observance of agreement, it is illusory.

However this may be, the essential thing is that some means should be found which, in the estimation of the parties to an agreement, will render it binding upon every individual member of the associations concerned, and in the present dispute it is up to the unions to find a satisfactory method.

NATIONAL FEDERATION OF BUILDING TRADES EMPLOYERS OF GREAT BRITAIN AND IRELAND.

LAST week we reported the first part of the proceedings at the annual meeting of the Federation, held at the Holborn Restaurant under the Chairmanship of Mr. F. Higgs (President). The following is a continuation of the report:—

Revenue Bill.

Mr. A. G. White (Secretary) reported the action of the Executive Committee with regard to the Revenue Bill which the Chancellor of the Exchequer has promised to reintroduce this Session in substantially the same form as the Bill which was withdrawn last Session. A detailed confidential Report dealing with the question of how far the Bill would remedy the grievances of the building trade under the Finance Act of 1909–10 had been considered, and the deputation which waited on the Chancellor was appointed a Committee to

press forward the suggestions contained in the Report.

The Report was adopted.

The National Association of Operative Plasterers.

The Secretary also reported that, owing to the labour dispute in London, no reply had been received from the London Association to the resolution passed at the last meeting asking them to come into the national agreement with respect to plasterers. The National Association of Operative Plasterers had sent an important communication in which they asked for a revision of the national agreement so as to permit any district to contract itself out like London. The Executive Committee had passed the following resolution:—"That any notice from the N.A.O.P. designed to permit branches to contract out should be strenuously opposed by our representatives on the National Joint Committee of Appeal."

Mr. Cooke, in proposing the confirmation of the resolution, expressed regret that London had not seen its way to join the agreement, which was in force practically throughout the country. It came as a great surprise in the provinces, both to the employers and the employed, that the London plasterers were outside the agreement, for, generally speaking, the agreement had been found of considerable use, and many disputes had been amicably settled under it. If they allowed any district to contract out it would simply open the door for the employment of the weapon of the sympathetic strike.

Mr. J. B. Johnson (Liverpool) seconded the motion, and, in urging that London should join with the rest of the country, he pointed out that, whereas before the agreement the plasterers had been one of the most difficult trades to deal with, since it had been effective there had been an era of peace and mutual arrangement.

The motion was carried.

Control of Trade Conditions.

The Secretary reported that the Executive Committee had considered the steps taken up to the present in regard to the above question, and decided to defer carrying out the request to draft a model agreement which should be applicable to other parts of the country until the one under present consideration had taken definite form.

International Federation.

The Secretary reported that the President and himself had been selected by the Executive Committee to represent the Federation at a Conference of the International Federation of Builders and Public Works Contractors, to be held in Berne in August, and it was also intended to try and organise a party from the Federation.

Replying to Mr. Elvin, the Secretary said that what had previously stood in the way of the Federation becoming affiliated with the International Congress was the matter of subscription. The Conference was very anxious to have the assistance and advice of the National Federation of this country and the question of subscription had been satisfactorily arranged.

Operative Bricklayers and Conciliation Boards.

A letter was received from the London Order of Operative Bricklayers, giving the necessary notice of their intention to withdraw from the National Conciliation Scheme. The Secretary explained that there were the London Order of Operative Bricklayers and the Manchester Order. The latter, which was a much smaller body, had not given notice of withdrawal. He knew of no reason for the withdrawal of the London Order, nor did he think their own officials knew of any. Attempts had been made to get the decision reviewed, but the notice stood good and would expire on May 1.

Mr. Moffatt (Birmingham) pointed out the difficulties which would arise in case of a dispute in ascertaining which of the two unions the men belonged to. It would mean that some men would be under the conciliation scheme whilst others would be outside it. The feeling in Birmingham was that if attempts were to be made to break down the concilation scheme like this, the only thing would be for the employers to give notice to discontinue conciliation altogether.

Mr. Doggrell (Southampton) remarked that the action of the union was another indication of the spirit of Syndicalism and Socialism prevailing amongst the men, but from what he had heard he did not think the leaders were in favour of it.

Mr. Matthews explained the position in Manchester, where the Manchester Order were under agreement to continue the operation of the Conciliation Board until May 19, 1915. In that case he did not see how they could escape without violating the rules they had signed.

The Secretary said so far as Manchester was concerned that would be so.

Mr. Woods (Bolton) said he believed the vote of the men was taken in a casual way, and to the consternation of the Executive the vote was in favour of withdrawal. Less than a third of the members voted on it. They ought as a Federation to see what could be done by steady pressure to prevent the withdrawal.

The President remarked that there was nothing they could do at the moment, but no doubt the Secretary and Mr. Storrs, the Chairman of the Conciliation Board, would do all they could to get the operatives to deal with the matter again.

Standing Demarcation Committee.

The Secretary reported that the Executive Committee had considered the resolution passed by the National Conciliation Board to the effect that steps should be taken to bring about permanent Demarcation Committees representative of all the trades concerned, with a view to dealing with demarcation disputes in the building trade. A Conference was suggested and eighteen unions had been approached, of whom six had replied in favour.

It was agreed that, in the event of a Conference being arranged, Messrs. S. Easten (Newcastle-on-Tyne) and J. Storrs (Stalybridge) should represent the Federation.

Operative Stonemasons.

The action of the Executive Committee on the proposals by the Northern Centre and by the Stonemasons' Society to amend the rules of the conciliation scheme was reported.

Answering Mr. Amphlet, the Secretary explained that the proposed amendment by the Stonemasons' Society would make no difference so far as the employers were concerned. In the past the operatives simply put their proposals in their publications, and if no objection was raised their Executive instructed their representatives to vote for them. Some of the local branches of the Society, however, wanted a vote of their members taken on any proposal so as to instruct their representatives as to the action they should take, and the amended rule would provide for that.

Election of President.

The President proposed the election of Mr. W. Thomas, of Cardiff, as President of the Federation in accordance with the recommendation of the Executive Committee.

Mr. Blackburn seconded the motion, and, it having been carried, Mr. Thomas was invested with the chain of office.

Mr. Thomas, in acknowledging the compliment paid him, said that one of the objects of the Federation should be to take the first opportunity of repealing the imposition placed upon the building and engineering trades under the unemployment part of the National Insurance Act. In his opinion a greater imposition was never imposed on employers of labour. He also failed to see why they should not have two forms of contract. He had watched the proceedings of the Federation for many years, and there was no doubt that the methods adopted in the North were very different to those adopted in London and in South Wales. Therefore he thought the time was ripe for a second form of contract being brought into use which would prevent the dissatisfaction which at present existed in the national form of contract. The same thing might also apply to the form of subcontract. The activity of the trade unions at present was apparent, and he strongly commended the action of the London employers in taking the bull by the horns. The only fault he found with London was that they did not delay action until the meeting of the Federation, because he thought if they had done that they would have been placed in a much stronger position with the Federation. Although they gave and would give London their heartiest support, yet he thought it would have gone out with better grace if they had brought the matter to the Federation first. In conclusion, Mr. Thomas proposed a hearty vote of thanks to the retiring President.

Mr. E. J. Brown seconded the motion, which was carried and briefly acknowledged by Mr. Higgs.

On the invitation of the Cardiff Association, it was agreed that the half-yearly meeting be held at the end of July in Cardiff.

Extraordinary Traffic.

A letter was received from the Midland Centre asking that the question of extraordinary traffic should be brought before the meeting and enclosing copies of correspondence with the War Office.

Mr. Moffatt (Birmingham) explained that the correspondence with the War Office was not complete. The Midland Centre wished the Federation to express its disfavour of the attempts being continually made to saddle the entire cost of extraordinary traffic due to building operations on the contractors by the putting of clauses in contracts. Their position was that extraordinary traffic should come on the shoulders of the building owner.

The matter was referred to the Administrative Committee to deal with.

Priced Schedules.

A resolution came up from the Birmingham Centre to the effect that it was against the practice of the Master Builders' Association to return priced schedules on bills of quantities with tenders, and asking the Federation to use its utmost endeavours to induce railway companies and other bodies to fall in with the usual practice.

Mr. Elvin, in moving that the resolution be referred to the Administrative Committee, said it was satisfactory that something had been done with the War Office in this direction, inasmuch as they would accept tenders for jobs over £2,000 without priced quantities.

The Dublin Strike.

Mr. Elvin asked what had been done with regard to assisting the Dublin Association in the strike.

The Chairman said the Federation had subscribed £250 and various centres had also sent money.

Mr. H. McLaughlin (Dublin) thanked the Federation as a body and the local branches and also individual firms for the generous support they had given to his Association during the five months' strike. As the result of that strike the whole city had been upset, and if they were to conclude the strike the next day they would not be at the end of their trouble. There was not, he supposed, an ounce of cement in the city, and little material of any kind. The wharves were congested and would take weeks to clear, and therefore a settlement did not mean getting to work again for weeks. The position in Dublin was not so much the question of carrying on the fight, which was indeed almost over, but they had between forty and fifty small contractors who had stood loyally with them to a man. They had not had one single withdrawal from the Association, whilst they had some fifteen or twenty men coming and joining in the fight who were not members of the Association. Some of these men had been very badly hit and had no capital left, and what they had to face was how to help these men to go on when the dispute was over. The large contractors had lost thousands of pounds, but in addition they had made a fairly heavy levy on themselves, and hence they would be glad of any further assistance which might be forthcoming. Should there be any surplus they had decided to form a Trust Fund from which they could assist any Association in the future which might be placed in a position similar to that which they had to face. Hardly an association of any description throughout the country had failed to assist the employers, and, much as they appreciated that financial assistance, they felt still more the moral support they had received. They had had to fight Syndicalism and Socialism, which were of English birth, and the Dublin employers knew they were fighting not only for themselves but for others all over the kingdom.

It was decided to issue a circular to all the branches with a view to getting further assistance for the Dublin employers.

On the motion of the President a hearty vote of thanks was accorded the Secretary, Mr. White, for his valuable services to the Federation.

MOORGATE HALL, FINSBURY, E.C.

The site for this large building, illustrated in the *Builder*, January 2, 1914, is now practically cleared, and building operations are in progress by Messrs. J. Chessum & Sons, Southplace, E.C. The architects are Messrs. Richardson & Gill, Russell-square, W.C.

THE PROVIDENT INSTITUTION OF BUILDERS' FOREMEN AND CLERKS OF WORKS:

ANNUAL DINNER.

THE annual dinner of this Institution was held on Saturday last in the King's Hall at the Holborn Restaurant, when the chair was taken by Mr. Sidney Gluckstein, supported by Colonel J. E. Holman and Messrs. S. I. Gluckstein, John Beer, Sanders, P. Gleed, R. Angel, T. Costigan, and others.

After the loyal toasts had been honoured the Chairman proposed the toast of "The Provident Insitution of Builders' Foremen and Clerks of Works," and in the course of his remark said that the Institution was founded in 1842 for the purpose of granting pensions to aged and infirm members, their widows and children, and for making grants of temporary relief. It was always disagreeable to ask for money, particularly when it was for other people, but that was not the only disagreeable thing he had to do that evening. He had to refer, because it was impossible at such a meeting as that to avoid making reference to it, to the present dispute in the building trade. He would not enter into the details of that dispute; it was sufficient to say that it was the outcome of an attempt on the part of the men's leaders to ignore all agreements, and to make their power absolute by completely suppressing free labour. Apart from the fact that such an attempt to interfere with the liberty of the subject was a gross outrage against all the traditions of the decent-minded Englishman, and could not be tolerated by a self-respecting employer, this was a movement which, if it were allowed to succeed, would destroy not only those against whom it was directed—the employer—but also those who were responsible for it—the workmen. He meant that while the trade unions are already sufficiently strong enough to protect their men against any attempted tyranny on the part of the masters, the position of the contractor in a state where trade unionism reigns supreme would be an impossible one, because he could be subjected to any annoyance or expense without any possible means of redress if such a condition were allowed to prevail. It would, for instance, be possible, and, indeed, probable, if the events of the last few months are to be taken as any indication, for the men to claim any increase that they liked to name in their wages, regardless of the fact that the contractor had calculated the amount of his contract on the rates existing when he signed it, and he would be entirely defenceless in such a case. Collective bargaining, therefore, having failed, individual bargaining was now upon its trial, and the number of men who had already signed the agreements indicated quite clearly that a large and constantly increasing number of them were beginning to see that they had been misled by their leaders, whose only objects and interest were apparently to create friction. With reference to the object for which they were there that evening, he felt that they owed a great debt of gratitude to the officials of the Institution for the whole-hearted and disinterested manner in which they had carried out, for many years, the functions of the Institution.

Mr. John Beer, the Corresponding Secretary, in acknowledging the toast, said that it gave him very great pleasure to see so many of their members present that evening, but he would like them to know that the whole of the organising of the dinner had been carried out by their Secretary, Mr. Searchfield.

Mr. S. I. Gluckstein then proposed the toast of "The Architects and Surveyors" in very humorous and somewhat technical terms, and Colonel J. E. Holman, in responding for the architects, said that it was about eleven years since he had been present at their annual dinner, and he was very glad to be present with them that evening. With reference to the builders, he personally believed in commending a builder if he did a job well, as it was a hundred to one that next time he would do better. He (the speaker) believed the time was past when men simply worked on a job for what they could get out of it, and he looked upon foremen and clerks of works as architects' assistants. He would like to remind them of a clause, with which they were familiar, in all specifications, which ran as follows:—"Provide the sum of £——— for———," and he hoped that that evening they would fill in the blank forms which would shortly be placed in front of them and provide any sum, even if it were only a shilling, for the purpose of helping forward the work of the Institution.

Mr. Sanders responded for the surveyors.

The toast of "The Builders and Contractors" was proposed by Mr. Percy Gleed, and was responded to by Mr. Halliday.

Mr. Ben Carter proposed "The Governors, Trustees, Donors, Subscribers, and Visitors," the response to which was made by Mr. T. Costigan and Mr. F. Brighten, and the proceedings terminated with the toast of the Chairman, proposed by Mr. Alexander Ritchie, and to which the Chairman made a suitable response.

WAGES IN THE BUILDING TRADE.

DUBLIN.—The labour troubles may now be said to be at an end. On Saturday last the dispute in connection with the building trade was settled, and it was announced that work would be resumed on Monday morning, February 2. The dispute has lasted nearly six months, and the men are returning to work on less advantageous conditions than those that existed when they left their employment. At a meeting of the builders' labourers a ballot was taken on the question of returning to work. Eight hundred and twelve members voted, and it was decided by 686 votes to 112—fourteen votes being "spoiled"—to accept the terms offered by the Dublin Building Trades Employers' Association. Subsequently the representatives of the labourers met the masters and handed in the following undertaking, which had been agreed to by their members:—"We undertake on behalf of the United Builders' Labourers and General Workers of Dublin Trade Union that none of our members will remain—or become in the future—members of the Irish Transport and General Workers' Union. Further, that our members will not take part in or support any form of sympathetic strike, they will handle all materials, no matter from where or how delivered, and carry out all instructions given to them in the course of their employment; they will also work amicably with all other employees, whether they be members of a union or not, and none of our members will in any way interfere with or make any objection to work with those who have already signed any agreement. Any of our members who may make any breach of any of these undertakings will be immediately dismissed from our union. The employers undertaking to re-employ such of our members as they may require, on the terms in force previous to the 13th of September last.—Signed on behalf of the United Builders' Labourers and General Workers of Dublin Trade Union, John O'Toole, President; Thomas M'Cullagh, Secretary; Thomas Heffernan, Delegate; John Doyle, Assistant-Secretary. Dated the 31st day of January, 1914." In addition to this, each individual labourer who is a member of the United Builders' Labourers and General Workers of Dublin Trade Union will, on applying for employment, sign and hand to his employer a card reading as follows:—"I, the undersigned, am a member of the United Builders' Labourers and General Workers of Dublin Trade Union, and I agree to act in accordance with the undertaking, dated the 31st January, 1914, which that Union has given on my behalf.—Signed..... Address..... Dated the ..... day of ..... NOTE.—This undertaking to be returned on the termination of the employment." It is estimated that the decision of the builders' labourers will affect some thousands of men. When the labourers struck a large number of skilled workers were thrown out of work in consequence. These men will now be at liberty to return again, but although the strike is finished, the lack of material in hand and the congested state of the quays and railway sidings is such that at least a month must elapse before work can be resumed in full.

KEIGHLEY.—The carpenters and joiners in this district are asking for an advance in wages of 1d. per hour (8½d. to 9½d.).

LONDON.—Although many thousands of men are idle in the building trade, owing to their refusal to sign the undertaking required by the masters to work peaceably with non-unionists, there can be no doubt that a great many men are willing to make agreements direct with the employers. In support of this statement, Mr. Walter Lawrence, jun., President of the London Master Builders' Association, stated in an interview that "One firm alone has had 250 men sign and another 228." Mr. Lawrence also gave three concrete cases which show that many men have signed the agreement:—

	Men Employed January 24.	Men Signing Undertaking.
A	217	110
B	289	162
C	192	89

Some firms are working at almost full strength and many others with 50 per cent. of their usual number of men. The London Master Builders' Association is receiving the support of non-associated firms, and on Saturday last these firms asked their employees to sign the agreement. A large number of men refused to do so, and thus the ranks of the unemployed have been increased. One of the most important firms to become members of the London Master Builders' Association is Messrs. J. Mowlem & Co. Several thousands of men who have ceased work made application at the Labour Exchanges for unemployed benefit, but were informed that they were not entitled to benefit owing to the fact that they were unemployed through a stoppage of work due to a trade dispute. They appealed to a Court of Referees, consisting of a representative of the employers, a representative of the men, and an independent Chairman, as provided in the National Insurance Act. The appeal was heard on Saturday morning last at the Labour Exchange, Catherine-street, Strand, and on Monday the official decision was announced as follows:—"As the result of prolonged deliberations, the Court of Referees upheld the decision of the Insurance Officer who had disallowed the claim to unemployment benefit made by certain building trade labourers." The electricians and french polishers engaged on the works and jobs of employers who have adopted the agreement have struck in sympathy with the other trades. The men are making preparations for a long struggle, dispute committees have been set up in several districts, and mass meetings are being arranged for.

STRATFORD-ON-AVON.—The labourers have given notice for an increase in wages of 1d. per hour (4½d. to 5½d.), to take effect on May 1 next.

APPLICATIONS UNDER LONDON BUILDING ACTS, 1894 to 1909.

THE Building Acts Committee of the London County Council have consented to the following applications under the London Building Acts:—

Lines of Frontage and Projections.

Hampstead.—Erection of sham half-timber work to six houses on the northern side of Stanley-gardens, Hampstead, as shown on the plan submitted with the application of Mr. C. A. Reavell on behalf of Messrs. Jarvis Brothers.

Lewisham.—Retention of a range of c ... bunkers at Westwood House, Westwood Park, Honor Oak, as shown on the plan submitted with the application of Messrs. Watson & Ellwood on behalf of Mr. F. Chancellor.

Norwood.—Erection of bay-windows and porches to Nos. 70, 72, and 74, Doverfield-road, Brixton-hill, as shown on the plan submitted with the application of Mr. H. Mackintosh on behalf of Messrs. J. Chubb & Co.

Wandsworth.—Erection of two-story bay-windows to houses on the eastern side of Bickersteth-road, Tooting, as shown on the plan submitted with the application of Mr. H. J. Hawkins.

Width of Way.

Finsbury, Central.—Erection of a building at No. 9A, Garnault-mews, Rosebery-avenue, as shown on the plan submitted with the application of Messrs. L. Solomon & Son.

Hampstead.—Erection of a motor garage at "Wildwood," North-end, Hampstead, with a forecourt boundary wall at less than the prescribed distance from the centre of a way leading out of the northern side of North-end, as shown on the plan submitted with the application of Messrs. Read & MacDonald on behalf of Dr. G. MacDonald.

Southwark, West.—Erection of a building on the northern side of Newcomen-street, Southwark, at less than the prescribed distance from the centre of the roadway of the street, as shown on the plan submitted with the application of Messrs. Woodd & Ainslie on behalf of the President and Governors of Guy's Hospital.

Lines of Frontage and Construction.

Strand.—Erection of an iron and glass shelter at the entrance to the Norfolk Hotel, Surrey-street, Strand, as shown on the plans submitted in connection with the application of Messrs. Boehmer & Gibbs.

Space at Rear.

Southwark, West.—Erection of a building upon the site of Nos. 145, 147, and 149, Borough High-street, Southwark, with an irregular open space at the rear, as shown on the plans submitted in connection with the application of Messrs. G. A. Lansdown & Brown on behalf of Messrs. Brooks & Co.

Wandsworth.—Alterations at premises at the rear of Nos. 18 to 24, Lainson-street, Southfields, as shown on the plan submitted with the application of Mr. R. Burr on behalf of Mr. R. Byford.

Deviation from Certified Plans.

Limehouse.—Deviations from the plan certified by the District Surveyor under such section of the Act, so far as relates to the proposed re-erection of Nos. 51-52, High-street, Shadwell, as shown on the plans submitted with the application of Mr. W. G. Drew.

RATES OF WAGES IN THE BUILDING TRADE.

THE following are the present rates of wages in the Building Trade in the principal towns of England and Wales. It must be understood that, while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur:—

——	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Masons' Labourers.	Bricklayers' Labourers.	Plasterers' Labourers.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Newcastle	10	10	10	10	9½	10	9	8½	8½	8½
Sunderland	9½	10	10	9½	9½	9	9	6½	6½	6½
Darlington	9	9½	9	9½	9½	9	7½	6½	6½	6½
Stockton-on-Tees	9	10	9½	10	9½	9	8½	7	7	7½
Bradford	10	10	9	9	9½	10	8½	6½	6½	6½
Halifax	9½	9	8½	8½	8½	9	8½	6½	6½	6½
Hull	9½	9½	9½	9½	9½	9½	8½	7	7	7
Leeds	10	10	9½	9½	9	9½	8	7	7	7
Sheffield	10	9½	9½	9½	9½	9½	8½	6½	6½	6½
York	9	9½	8½	9½	9½	8½	7½	6½	6½	7½
London	11½	11½	11½	11½	—	1s.	9	7½	7½	7½
Brighton	8-9	8	8	—	—	—	—	—	—	—
Portsmouth	9	9	9	9	—	8	7½	6½	6½	6½
Southampton	8½	9½	9½	8	—	9½	8½	6½	6½	6½
Maidstone	9	9	9	—	—	9	7½	5½	5½	5½
Bristol	9½	9½	9½	9½	—	9½	9	6½	6½	6½
Plymouth	9	9	9	9	—	9	7½	6	6	6
Bath	7½	7½	8	8	7½	7½	7	5-5½	5-5½	5-5½
Cheltenham	8½	8½	8½	8½	—	8½	7½	5½	5½	5½
Exeter	8	8	7½	7½	7½	7½	6½	5	5	5
Gloucester	7½	8½	8½	7½	7½	8½	7½	5½	5½	5½
Hereford	7½	8	7½	8	7½	7	6½	5	5	5
Stroud	7½	7½	7½	7½	7½	7½	7	5	5	5
Blackburn	10	10	9½	9	9½	9½	9½	6½	7	7
Bolton	10	10½	10	10½	9	10	9	—	—	—
Liverpool	11	11	11	10	10	10	9½	6½	6½	6½
Manchester	10	10½	10½	11	9	10	9½	6½	6½	7½
Oldham	10	10½	10	9½	9	10	9½	6	7	7½
Preston	9½	10	9½	9	8½	9	8½	5½	6	6
Birmingham	10	10	10	10½	9	10½	9	7	7	7
Derby	9½	9½	9	9	9	9	8	6	6	6½
Leicester	9½	9½	9½	10½	9	9½	8	7	7	7½
Nottingham	10	9½	9½	10	9	9½	9	7	7	7½
Norwich	8	8	8	8	8	8	6½	5	5	5
Cambridge	9	8½	8½	9	8	9	7	5½	5½	5½
Oxford	9	8	8½	8½	Piece-work	8½	7	6	6	6
Southend	9	9	9	9		9	7	6	6	6
St. Albans	9	9	9	10	8½	9	8	6	6	6
Grays	—	10	10	—	—	—	8½	7	7	7
Cardiff	9½	9½	9½	9½	9½	9½	8½	6½	6½	6½
Swansea	9	9	9	9	8½	9	8½	6	6	6
Newport	9	9	9	9	8½	8½	8½	6	6	6
Chatham	8	9	8½	9	9	8½	7	5½	5½	5½
Birkenhead	11	11	11	10½	10	10	9½	6½	6½	6½

The mason's rate given is for bankers; fixers usually ½d. per hour extra.

Stepney.—Deviations from the plan certified by the District Surveyor under such section of the Act, so far as relates to the proposed erection of a building at the rear of No. 115, Jubilee-street, Mile-end, next to Oxford-street, as shown on the plan submitted with the application of Messrs. Ward & Co. on behalf of Mr. J. Goldstein.

Alteration of Buildings.

Finsbury Central.—Erection of an additional story at Nos. 151-157, Goswell-road, Finsbury, without complying with the provisions of the First Schedule to the said Act, as shown on the plan submitted with the application of Messrs. Boreham & Gladding.

Kensington, North.—Alterations at No. 2, Golborne-road, Kensington, without complying with the provisions of sect. 74 of the said Act, as shown on the plans submitted in connection with the application of Mr. A. Crutchlow.

Uniting of Buildings.

City of London.—Uniting of Nos. 21 and 23, Moor-lane, City, at the first-floor level, as shown on the plan submitted with the application of Mr. E. Flint on behalf of the trustees of the Lewis Estate.

Holborn.—(i.) Steel-framed division walls 14 in. thick, (ii.) the omission of the division walls above the iron and concrete roofs, (iii.) the omission of the division walls on the ground story between the cartway entrance and the goods lift platforms adjoining, (iv.) division wall openings exceeding the statutory size, and (v.) the provision of double iron roller shutters to division wall openings at a proposed building to abut upon Kingsway, Kemble-street, and Keeley-street, Kingsway, as shown on the plans submitted with the application of Messrs. G. & T. S. Vickery on behalf of the General Electric Company.

Westminster.—Uniting of Nos. 52 and 53, Vincent-square, Westminster, at the second-floor level, as shown on the plans submitted with the application of Miss F. H. Birley.

Cubical Extent and Uniting of Buildings.

Limehouse.—Further deviation from the plans approved on August 28, 1912, under sects. 17 and 18 of the London County Council (General Powers) Act, 1906, for the erection of an addition at the premises of Messrs. W. G. Clarke & Sons, Argyle Wharf, Thomas-street, Limehouse, so far as relates to the erection of further additions, as shown on the plans submitted with the application of Mr. D. Fish.

PROPOSED NEW BUILDINGS AND OTHER WORKS.*

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works, at the time of publication, have been actually commenced. Abbreviations:—T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; L.G.B. for Local Government Board; B.G. for Board of Guardians; L.C.C. for London County Council; B.C. for Borough Council; and P.C. for Parish Council.

ATHERSTONE.—Plans approved for four houses at Boot-hill, Grendon, for Mr. Rowland Jones.

Birmingham.—Plans have been prepared for the erection of the baths at Saltley for the T.C., the total estimated cost being £19,261 16s. 6d. The T.C. also propose to proceed with a sewerage scheme for dealing with the area of the Hall Green and Yardley Wood district, lying between Titterford Mill and the city boundary, at a cost of £24,400; and to enlarge and improve Selly Oak police sub-station, at an estimated cost of £965.

Bispham.—Plans approved by U.D.C.:—Mr. J. Twelves, additions to house, Frederick-street; and Cliff and Norbreck Hydro, Ltd., additions to hydro.

Blackpool.—Plans passed by T.C.:—Mr. James Ward, new street, adjoining Layton-lane; Mr. Thomas Kirkham, new street, Ferguson-road; Mr. E. Masurk, two houses, Rathlyn-avenue; Mr. R. G. Bateson, two houses, St. George's-avenue; Messrs. Brittain & Jewett, two houses, Handsworth-road; Mr. J. L. Harrison, four houses and joiner's shop, Henry-street; Mr. J. Williams, six houses, Norwood-avenue; Mr. Fredk. Ilett, two houses, Hawes Side-lane; Messrs. Catterall & Swarbrick, hotel, Bloomfield-road; Mrs. H. Vickers, seven houses, corner of Ripon-road and Gainsborough-road; Messrs. Morris & Rushton, six houses, Ripon-road; Mr. W. Cunliffe, two villas, St. George's-avenue; Mr. J. Hall, four houses, Waterloo-road and proposed street; Mr. M. A. Eckersley, two villas, Longton-road; Mr. S. Berry, two houses, Leicester-road; Mr. James Gregson, house and shop, Palatine-road and Ripon-road; Mrs. G. Fletcher, four houses, corner of Read's-road and Park-avenue; Mr. W. Chadwick, two houses, King Edward-avenue; Mr. Wm. Moister, one house, Preston Old-road; Mr. J. Whiteside, two houses, Read's-avenue; Mr. A. Fletcher, one house, Palatine-road; Mr. F. Tomlinson, alterations and additions to premises, Upper Talbot-street; Mr. G. Smith, two houses, Manor-road; Messrs. J. & W. Dugdale, twelve houses, Ferguson-road; Mr. J. E. Eckley, two houses, Longton-road; Mr. R. H. Barnes, four houses, Drummond-avenue; Mr. A. Midgley, three houses, Layton-lane and Layton-avenue; Mr. J. Midgley, six houses, Broughton-avenue; Mr. S. Witt, motor garage, Castle-gate; Mr. A. E. Stanley, motor garage, 197, Hornby-road; Mr. G. Morris, extensions to bakehouse, Castle-gate; Misses Smith, extensions to bakehouse, 15, Lytham-road; Dr. Bucknill, two outbuildings, premises in Whitegate-drive; Misses Smith, alterations to premises, 15 and 17, Lytham-road; Mr. A. E. Shoesmith, additions to premises, Bolton-street, South Shore; Mr. J. J. Cryer, alterations to house, 24, King-street; Mr. John Roper, shop front to premises, corner of Central-drive and Belmont-avenue; Mr. H. N. Rose, shop fronts to premises, Whitegate-drive and Kensington-road; Miss A. Greenwood, alterations to premises, 19, 21, 23, and 25, Wellington-terrace; Blackpool Tower Company, Ltd., subway between tower and palace, Victoria-street; Palatine Hotel Company, Ltd., loading way, Adelaide-place; Morris's All Picture Palaces, Ltd., verandah to Royal Pavilion, Rigby-road and Tyldesley-road; Blackpool Tower Company, Ltd., alterations to Tower-buildings, Victoria-street; Mr. Wm. Butcher, alterations to Masonic Hall, Waterloo-road, South Shore.

Bromley.—The B.G. has appointed Mr. F. Danby Smith as architect to prepare plans for the new infirmary scheme. Plans passed by T.C.:—Mr. F. G. Crickett, five houses, Herbert-road; Messrs. J. Marsland & Sons, additions to stables, Abingdon House, Rodway-road; Mr. J. A. Stayner, house, Park-avenue; Mr. F. G. Crickett, additions to showrooms, 93, Mason's-hill.

Burnley.—Two schools are proposed on acquired sites in Lionel-street and St. Cuthbert-street at an approximate cost of £17,000 and £15,300 respectively.

Cannock.—The U.D.C have decided to undertake the building of houses and formulate a scheme under the Housing of the Working Classes Act and submit it to the L.G.B. for approval. It has also been resolved to lend money at a low rate of interest to working men who wished to erect their own houses.

Cardiff.—The Finance Committee of the T.C. have approved of the borrowing of a sum of £48,000 in respect of new works at Lisvane, a reservoir at the Heath, and a new water main from the Heath filter beds to the city.

Carlisle.—The E.C. have decided to apply to the L.G.B. for sanction to borrow a sum not exceeding £750 for the site and £6,000 to build and furnish the new school at Newtown.

Chapel-en-le-Frith.—The National Portland Cement Company, who project large works at Barmoor Clough, are boring artesian wells in their search for water.

Chelmsford.—The T.C. has instructed the Borough Engineer to prepare plans for a house in Manor-road for the road foreman.

Chester.—The T.C. have approved of the scheme, prepared by Mr. Patrick Abercrombie, for laying out the portion of the Buddicom Estate (Hough Green), purchased by the Corporation, and have decided that the Committee be empowered to take the necessary steps towards securing the erection of 131 houses by obtaining the necessary designs and estimates, and that application be made to the L.G.B. for their approval of the plan for the laying out of the land and for the carrying out of the scheme. It is proposed at first to proceed with the erection of seventy houses.

Christchurch.—The L.G.B. has held an inquiry into an application by the R.D.C. for sanction to borrow a sum of £700 for the provision of an administration block at their Isolation Hospital in Fairmile.

Coventry.—The T.C. have passed a scheme for the erection of 198 artisans' dwellings at an estimated cost of £40,282. Plans passed:—Alterations and additions, Gosford-green, for Mr. C. W. Smyth; four houses, Earlsdon-avenue, for Messrs. Cox & Co.; two houses, Earlsdon-avenue, for Mr. W. H. Satchwell; one house, Swan-lane, for Mr. A. Jeffs; two houses, Stoney Stanton-road, for Mr. H. G. Storer; two houses, Styvechale-avenue, for Mr. E. Harris; four houses, Clay-lane, for Messrs. Brooks & Youell; extension, Much Park-street, for the Charlesworth Bodies, Ltd.; alterations, etc., to premises (late Holy Trinity Vicarage), St. Nicholas-street, for the Trustees of St. Faith's Home Girls' Friendly Society; four houses, Parkside, for Mr. H. Cousins; six houses, Clay-lane, for Mr. H. J. Emery; offices, Friars'-road, for Messrs. Bennett & Wood; Back-road, rear of Earlsdon-avenue, for Mr. W. H. Satchwell; house and farm buildings, off Allesley Old-road, for the Trustees of Sir Thomas White's Estate; two houses, Ethelfield-road, for Messrs. Jervis Bros.; four houses, Bryn-road, for Mr. H. Hirons; two houses, Quinton-road, for Mr. E. Harris; hardening shop, off Foleshill-road, for the Standard Motor Company, Ltd.

Crediton.—Mr. Jasper, Engineer, has submitted to the U.D.C. a detailed estimate of the cost of the new sewage-disposal works, viz., £8,450, and the estimate is to be forwarded to the L.G.B.

Criccieth.—The L.G.B. have informed the T.C. that they are satisfied as to the need for additional housing accommodation, but are prepared to defer the whole question on the understanding that the Council will submit a revised scheme within four months providing for houses at lower rentals.

Dover.—Plans for Messrs. Worsfold & Hayward for a shop at the corner of High-street and Tower Hamlet-road have been approved.

Dumbarton.—The Dean of Guild Court has granted a warrant to the Trustees of the late Mr. J. Thomson, draper, to demolish property in High-street and to erect new buildings.

* See also our list of Competitions, Contracts, etc., on page 175.

Dunmow.—The Essex E.C. have agreed that plans shall be prepared for a new school to accommodate 300 children.

Durham.—Plans passed by R.D.C.:—Mr. M. R. Hope, stable, East Hetton; Sleetley Lime Company, six dwelling-houses, Coxhoe; Mr. R. J. Dixon, dwelling-house and shop, Ushaw Moor.

Earby.—Plans passed by U.D.C.:—Pump-house at Spring Mill, for Mr. C. W. Bailey; two houses in Colne-road by Mr. A. G. Carter.

Easington.—The R.D.C. have passed plans for twenty houses at Shotton Colliery for the Horden Collieries, Ltd., and six at the same place for Messrs. Nixon Bros.

East Barnet.—Plans passed by U.D.C.:—Additions to Kate's Cabin, Station-road, for Mr. F. T. Bidlake; new hall at the rear of the Warwick Hotel, Victoria-road, for Messrs. Charrington & Co.

Eastbourne.—A shortage of cottages existing, the Duke of Devonshire, besides placing a considerable area at the disposal of the Artisans' Dwellings Company, has offered two sites to the T.C. One is 9 acres in extent and is offered at £180 an acre. Another acre will be given free for gardens. The other site is 8½ acres and is offered at £250 an acre. The Duke's agent suggests that the cottages should be semi-detached, and that each should have 10 rods of ground. He thinks it should be possible to build cottages at £380 per pair and let them at 6s. 6d. or 7s. a week. The material should be brick and the roofs tiles.

Elgin.—Plans approved for alterations at 158, High-street, for Messrs. Stephen & Co., drapers; alterations at Thunderton-place for Messrs. A. & W. Ogilvie, coal merchants; and rearrangement of bakery premises proposed to be carried out by the trustees of the late Mr. Alex Austin.

Finchley.—The U.D.C. have decided to apply to the L.G.B. for sanction to a loan of £93,443 for the building of 300 workmen's cottages on the Woodhouse Estate, North Finchley. The scheme provides for 240 houses, each to cost £265, and sixty houses, to cost £225 each, the more expensive dwellings to be let at 8s. 6d. a week and the less expensive at 7s. 6d.

Foleshill.—Plans approved by R.D.C.:—Four houses for Mr. A Saunders, Goodyer's End, Exhall; two houses at Hall Green, Foleshill, for Messrs. Roberts & Weatherby.

Garstang.—The Surveyor of the R.D.C. has prepared plans of cheap cottages, estimated to cost £190 each, including pathways, fences, sewerage, and water supply. The matter has been deferred pending the plans being laid before the P.C.

Glasgow.—The Dean of Guild Court have granted the following warrants:—Mr. Archibald Davie, builder, 11, Riverside-road, Newlands, to erect a joiner's workshop in Merrylee, Cathcart; Messrs. Smith & M'Lean, Ltd., Clyde Galvanising Works, Mavisbank, to take down the existing buildings and erect new buildings there; Mr. James Wright, builder, 1, Newlands-terrace, Newlands, to erect tenements of dwelling-houses on the south side of Trefoil-avenue; Messrs. William Beardmore & Co., Ltd., Parkhead Forge, to erect offices at the corner of Dawson-street and a new street, Parkhead; Mr. George Green, 843, Gallowgate, to erect a building to be used as a cinematograph theatre in Wellshot-road, Tollcross; the Corporation of Glasgow (Tramways Department) to make alterations and additions to property at 42 to 46, Bath-street.

Gourock.—The T.C. are endeavouring to get the Renfrew C.C. to build the proposed police-station on a site adjoining that on which municipal offices are to be erected.

Hartlepool.—The E.C. are considering plans for a new elementary school in the Throston district, with a view to providing accommodation for teaching cookery, woodwork, and other handicrafts.

Hartley Wintney.—Plans passed by R.D.C.:—House at Yateley for the Misses Fordwin; two cottages at Hawley-hill, Yateley, for Mr. A. H. Templar; two cottages at Frogmore for Mr. R. Barnard.

Hebden Bridge.—Plans passed for seven houses in Moss-lane for Messrs. B. Sutcliffe & R. Greenwood.

Holmfirth.—The L.G.B. have held an inquiry concerning the application of the D.C. for approval of the appropriation of land acquired for a market, as a site for an electricity generating station, and sanction to borrow £7,500 for plant, etc.

Hornsey.—Plans passed by T.C.:—Ten dwelling-houses in Nightingale-lane and three dwelling-houses in Rectory-gardens, Hornsey, by Mr. William Crampton, of Upper Kennington-lane; two dwelling-houses in Woodside-avenue, Muswell Hill, by Mr. Henry Jones, of Alexandra Park; alterations in and additions to "Plymton," Fordington-road, Muswell Hill, by Mr. Chas. Tucker, of Fortis Green; dwelling-house in Woodside-avenue, Muswell Hill, by Mr. Harry Crook; six dwelling-houses in Redston-road, Hornsey, by Mr. Harry East; dwelling-house in Fordington-road, Muswell Hill, by Mr. Charles Tucker; alterations in basement at Christ Church Parish Hall, Edison-road, Crouch End, by Mr. John Farrer; dwelling-house in Fermo Park-road, Hornsey, by Mr. William Thomas, of Inderwick-road; addition to 12, Berkeley-road, Crouch End, by Messrs. F. Cottrell, Ltd.; alterations in and additions to lodge at "Caen Wood Towers," Hampstead-lane, Highgate, submitted by Messrs. Church, Quick & Whincop, of Woolwich; motor garage at 48, Stapleton Hall-road, Stroud Green, by Mr. T. W. Saint, of Stroud Green-road; eight dwelling-houses in Grove-avenue, Muswell Hill, by Mr. W. B. Collins, on behalf of the Rookfield Garden Village, Ltd.

Hull.—The City Engineer is preparing an improvement scheme for an area in the city which the Medical Officer considers unhealthy. Mr. F. Reckitt has given £20,000 for extending the social work in connection with the firm of Messrs. Reckitt & Sons, Ltd., and part of the gift will be used to erect an institute.

Hursley.—The L.G.B. have held an inquiry into the proposal of the R.D.C. to spend £10,000 upon a drainage scheme for Chandler's Ford. Plans have been passed for alterations to Victoria Inn, Allbrook.

Kidsgrove.—The Staffordshire E.C. have decided to purchase 2,420 sq. yds. of freehold land for a new boys' school and special subjects centre.

Kingston-on-Thames.—The T.C. have decided, subject to the sanction of the L.G.B., to utilise a site on the Fairfield for the erection of the new Tiffin Boys' School.

Leicester.—The T.C. have approved plans for the erection of sanatorium buildings for tuberculosis patients on land adjoining the Isolation Hospital. The buildings comprise sanatorium wards and shelters for twenty-four male and twenty-four female adult persons, and a hospital block for twenty-eight advanced cases. The estimated cost of the work is £12,350. Twelve acres of land are to be transferred to the E.C. for the proposed new Wyggeston Boys' School.

Macclesfield.—A L.G.B. inquiry has been held into the application of the T.C. for approval of the borrowing of sums amounting to £14,100 for the purposes of their water undertaking, including the execution of works, at Langley.

Manchester.—The members of the Athenæum have decided to erect a new building and to raise £20,000 by mortgage for the purpose. A scheme is on foot to erect an art gallery and library on the site of the old infirmary.

Newcastle-on-Tyne.—The Corporation have accepted the following tenders:—Darlington Construction Company, Ltd., for the erection of a single-story shed at No. 12 Berth (old London Wharf), £2,495; Messrs. Osborne Bros., bowling green shelter at Walker-road Recreation Ground, £232 8s. 5d.; Messrs. Adam Robertson & Son, for painting and cleaning Gallowgate Baths, £137 10s.; Mr. M. Alexander, for painting and cleaning at Elswick Baths, £165 5s. 5d.; Messrs. R. J. Ward Co., Ltd., for heating apparatus at Welbeck-road Council schools, £289 12s. 6d.; Messrs. R. J. Ward Co., Ltd., for heating apparatus at Rye Hill Council school, £499 12s. 6d.; Messrs. Dinning & Cooke, for heating apparatus at Cruddas Park Council school, £365

Newport, Mon.—Plans have been approved by the Works Committee of the T.C. for an extension of the cold storage premises in Shaftesbury-street. The Mannesman Tube Company have secured a site for new works.

Nuneaton.—The B.G. have instructed Mr. E. E. Shepherd to prepare plans and specifications for a new home.

Oldham.—The L.G.B. have sanctioned the T.C. erecting public washhouses.

Quarry Bank.—The Staffordshire E.C. have instructed the architect to prepare a scheme for altering and improving the Council school.

Reigate.—Sanction has been received by the T.C. to raise the following loans:—£650 for Redhill Police-station and £450 for Redhill Fire-station. Plans passed by R.D.C.:—Two cottages, Smallfield, for Messrs. A. King & Son, Smallfield; addition to house, Lower Kingswood, for Mr. E. Huskinson, Breachhurst, Kingswood; addition to two houses, Moons-road, South Nutfield, for Mr. A. V. O. Howick, Nutfield; motor house for Mr. Lloyd George's house for Sir George Riddell, Walton-on-the-Hill.

Renfrewshire.—The Upper District Committee of the County of Renfrew has agreed to make application to the L.G.B. for authority to prepare a town planning scheme, with reference to the area which is in course of development, or appears likely to be used for building purposes, within the portion of the Renfrew parish and county on the north of the river Clyde.

Rugby.—Plans passed by T.C.:—Messrs. Ewer Bros., house in Frederick-street; Mr. J. Smith, additions to 2, Spring-street; Messrs. J. Tallon & Son, house and shop in Park-road; Mr. J. Young, six houses in Maple-grove; Mr. W. H. Taplin, house in Poplar-grove; the Rev. C. T. Aston, new chancel to St. Matthew's Church; Mr. S. J. Dickson, additions to 1, Whitehall-road.

Saddleworth.—Plans for two houses at Wallhill, Dobcross, by Mr. W. Craven, farmer, passed.

Selby.—On the site of several hundred acres recently secured at Barlow by Messrs. Armstrong, Whitworth, & Co., of the Elswick Works, Newcastle, it has been decided to erect an aeroplane factory. A Selby lady has promised £500 towards a new project which the vicar and churchwardens of Selby Abbey are inaugurating to provide a Church Institute, to clear the Abbey precincts of the dilapidated yard, and other things. The cost of the first portion of the project is £1,000, and it is proposed to put down an institute in the Tudor style of architecture on the site of Burton's Yard at the north-east corner of the Abbey, which has been purchased for that object.

Sheffield.—A L.G.B. inquiry has been held relative to the application of the T.C. for sanction to borrow sums of £2,100 and £5,000 for works of street improvements, and £10,093 for paving works in ten streets in various parts of the city. There was no opposition.

Sleaford.—The plans of a new picture and variety theatre proposed to be erected in St. Thomas'-road, Spalding, by Mr. Bancroft, of Wisbech, have been approved.

South Shields.—The L.G.B. have held an inquiry in regard to the scheme of the South Shields Guardians to provide an independent water supply for the workhouse and cottage homes, the cost of which would be about £8,000.

Steeple Bumpstead.—The Essex E.C. have decided to erect a new Council school in place of the old Church school.

Stone.—Land has been purchased by the Staffordshire Territorial Force Association for a drill-hall.

Sudbury (Suffolk).—The T.C. have decided to apply to the L.G.B. for sanction to a loan of £1,400 for water purposes.

Swanage.—A L.G.B. inquiry has been held into the application of the U.D.C. for sanction of a loan of £9,500 for the purposes of water supply.

Tamworth.—The Burial Board propose erecting a chapel in the cemetery.

Tibshelf.—The churchpeople have decided to erect a new church hall, and, as a preliminary, have agreed to the exchange of glebe land for a suitable site.

Torquay.—The E.C. propose a new technical school to cost £11,000.

Whitchurch (Hants).—Plans for a new church hall at Overton have been passed by the R.D.C.

Willenhall.—A drill-hall is to be erected by the Staffordshire Territorial Force Association.

Wolstanton.—The U.D.C. have decided to purchase a site for new offices at a cost of £1,000, and have adopted sketch plans by their Surveyor for the erection of buildings which will include several shops on the ground floor, the estimated cost being £6,000.

Wrexham.—Sir Thomas G. Jackson, R.A., has submitted his report on the interior of the chancel of Wrexham's famous church. The improvements suggested include a marble pavement and steps, a marble reredos with panels of statuary, and the filling of the three apse windows with good glass. The total cost of carrying out the work will be about £2,000, and it has been resolved to proceed with the scheme. A special meeting of the T.C. is to be convened to consider the question of providing municipal buildings.

York.—Plans approved by T.C.:—Picture house and café, Coney-street, for York Cinema Company.

GENERAL BUILDING NEWS.

WORSLEY CHURCH, NEAR MANCHESTER.

A church is being built in the Winton district of Worsley upon a site given by the Earl of Ellesmere, who will also defray the cost of the chancel, chapel, vestries, and tower. The plans provide for a total of 600 sittings; for the present only three bays of the nave will be erected. The designs of Mr. R. T. Beckett, of Chester, were selected in a competition for which Mr. W. D. Caröe acted as assessor on behalf of the Church Building Society.

SCHOOL, HAMMERSMITH, W.

A school is in course of erection in Limegrove, Hammersmith, W. The architect is Mr. W. E. Riley, F.R.I.B.A., Superintending Architect of the London County Council. Messrs. Walter Lawrence & Son, Finsbury-circus, E.C., are the general contractors.

OFFICES, WESTMINSTER, S.W.

A large block of offices, to be known as Imperial House, is in course of erection in Tothill-street and Dartmouth-street, Westminster. The architects are Messrs. Metcalf & Greig, Kingsway-chambers, Kingsway, W.C., and the general contractors for the foundations and the superstructure are Messrs. W. H. Lorden & Son, Trinity-road, Upper Tooting, S.W.

MODEL DWELLINGS, CHELSEA, S.W.

Sutton model dwellings have just been completed in Leader-street, Chelsea, at a cost of about a quarter of a million. There are numerous blocks of five stories high dwellings. The architect was Mr. E. C. P. Monson, F.R.I.B.A., Finsbury-pavement House, Finsbury-pavement, E.C., and the general contractor was Mr. Monk, of Edmonton.

COLD STORE, ROYAL ALBERT DOCK.

In connection with the extensive building operations in progress at the London Docks, a new cold store and sorting shed is being constructed at the Royal Albert Docks. The work is being carried out under the direction of Mr. C. R. S. Kirkpatrick, M.Inst.C.E., Chief Engineer to the Port of London Authority. The general contractors are Messrs. J. Chessum & Sons, South-place, E.C. It is interesting to note that the foundations are carried on piles.

MODEL DWELLINGS, ROTHERHITHE.

Eight blocks of workmen's dwellings, three stories high, are about to be erected for the Sutton Trustees in Chilton-street and Plough-road, Rotherhithe, S.E. The architect is Mr. E. C. P. Monson, F.R.I.B.A., Finsbury-pavement House, E.C.

THE LONDON COUNTY AND WESTMINSTER BANK, LTD.

The balance-sheet of the London County and Westminster Bank, Ltd., is to be found in our advertisement pages, and we would draw attention to the profit and loss account, from which it will be seen that the gross profit for the year, after making all necessary provision, amounts to £3,748,244. The company has an amount of £13,757,106 in cash in hand and at the Bank of England, and those who carefully study the balance-sheet will agree that the bank is in a very satisfactory condition, both to directors and shareholders and customers.

THE GARDENS OF THE GREAT MUGHALS.*

"A garden enclosed—a garden of living waters and flowing streams from Lebanon: awake, O North wind, and come, thou South, blow upon my garden, that the spices thereof may flow forth."

"A GARDEN enclosed, a garden of living waters, a garden of sweet perfumes—that the spices may flow out—here, from the 'Song of Songs,' are the three first motives of Indian garden-craft." With these words opens the first work of its kind in English, probably the first in any language; a book worthy of its fascinating subject, the neglect of which contrasts curiously enough with the flood, and the scum that is upon the face of the flood, of books dealing with European gardens in general and English gardens in particular of which the world is weary. To Mrs. Villiers Stuart the garden has its literary as well as its horticultural value, and her work is a monument of scholarship as well as of love of her delightful subject. The introductory chapter, "On Some Early Garden History," reviews the matter from the historical side, and emphasises the practical as well as the artistic value of those garden-palaces and those enclosing walls, those pools and fountains and shady walks of which such gardens largely consist. In the illustrations to this chapter, which are taken from manuscripts and illustrate two of the sayings of Babar, we see these characteristics fully developed; it is indeed not a little curious to note that the artist's use of walls, trees, and birds suggests one group at least of Western decorative paintings on a very different scale, the exquisite garden-frescoes of the Villa of Livia at Prima Porta, some few miles from Rome. The Romans indeed, like the Mogul princes, realised that gardens should be emblems of civilisation rather than imitations of Nature, related to the palace rather than the park. Our ancestors thought the same, and if the seventeenth-century ideal of the formal garden erred by an excess of mathematical forms, it has taken us a century and a half to recover from the reaction to the landscape gardening of Kent and his successors, which, instructed by Mrs. Villiers Stuart, we must now further deplore as the destroyer of garden-planning in India as well as in England.

But form in Mogul gardening had more than a formal significance; not the general design only, but each flower and tree had originally its symbolic meaning and method of arrangement, since it was "from the North, from Central Asia and Persia, that these splendid garden traditions were introduced into India," and the Mohammedan garden was a sacred thing. With the Mogul conquerors to protect them, the Indian artists of the formal garden finally achieved a true native style, distinct from and yet closely related to the gardens of its origin and culminating in those glorious Kashmir *baghs* of the Emperor Jahangir and his Persian wife, which are described in Chapter VIII. Sadi, Hafiz, and Omar sang of the ideal garden, and their disciples and descendants put their ideals into practice, helped thereto no doubt by a satisfactory sense of piety in thus carrying out on earth the formal terraced garden of the Paradise of the Koran.

Thus "the two great influences which underlie all national arts, climate and religion," led to the formation of the *baghs* of Hindustan, whose neglected glories have at last found a worthy historian. No greater tribute could be paid to Mrs. Villiers Stuart than the simple statement that the text of her book is more vivid than the illustrations. No more beautiful descriptive writing has appeared of recent years, and the literary allusions which abound in her pages help the reader by connecting the known with the unknown. Cowley's famous sentence, "God Almighty first planted a garden," leads up to the sacred origin of the Mohammedan garden; Sadi sings of roses two hundred years before Chaucer; Akhbar gathers round him artists and scribes to illuminate manuscripts of Babar's treatise on the Garden; a Flemish manuscript of the "Roman de la Rose" represents what might be a Mogul garden; the French physician of Aurungzebe describes the adornment of the Emperor's camping-place on the march with screens hung with flower-patterned printed calico. And the reader passes happily from the known to the new, feeling that the author and he are friends.

To the question why, since, in the author's opinion, "the average Englishman in India takes a far more practical interest in his garden there than he would do at home," recent garden-craft in India has lost the old sense of design, two answers are given. The first is, the obvious change of habits and manners which has made the cool hill-station take the place of the garden, with its fountains and cool pavilions; the second, the introduction into India of landscape gardening, with its destruction of the old belief in the relation of house and garden, which makes us moderns sigh for the formality of Villario's plantations, though it is only fair to Pope to add that, if he despised the walled garden, with its fountains and its yews, he lamented the folly of those who go to the opposite extreme of the "one boundless green" that was beginning to be popular.

As one turns over the pages of the book and notes the pools and fountains of the Taj, the floral details from its dado on Plate IX.—a wonder of art, with their feeling for flower form and decorative rightness, such as only the Romans have achieved besides in reliefs like the Rose Pillar of the Lateran—the fountain-bath of the Sultana from the Jasmine Tower, the Grape Garden of Agra, the Shah-Dara, five miles north of Lahore, or the Nishat Bagh, under the shadow of the Kashmir hills, one feels the truth of the phrase of a famous garden saying, quoted on p. 179, "Places of Pleasure." But whether the creative instinct is still strong enough in the land to be trusted with the creation of New Delhi is another question, though the author's statement (p. 276) that:—"Religion, high politics, and statecraft may seem far enough away from gardens, but sound art makes for sound politics, and their affinity in India is curiously close," embodies a real and vital truth. The buildings of New Delhi are, after all, to be inhabited primarily by Europeans, to set forth European rule; but this should be no bar to the incorporation of what is best in the minor arts in which India excels, and one may reasonably hope that Mrs. Villiers Stuart has not written in vain when she urges the claims of Indian garden-craft. In the gardens at least there need be no compromise, and her concluding paragraph is as wise as it is timely:—"If the Palace at New Delhi could form part of a scheme with a great Imperial Indian garden, with its symbolic divisions, waterways, avenues, fountains, and walls, Indian art would receive a stimulus and Indian loyalty—a lead which it would be impossible to overrate, although hard to believe in England, where the gardens, beautiful as they are, lack the practical use and deeper religious significance of Indian garden craft."

* "The Gardens of the Great Mughals." By C. M. Villiers Stuart. (A. & C. Black. 1913.)

THE QUANTITY SURVEYORS' ASSOCIATION:

ANNUAL DINNER.

THE annual dinner of the Quantity Surveyors' Association (Incorporated) was held on Tuesday in the Connaught Rooms, Great Queen-street, W.C., when the President, Mr. T. J. Carless, A.K.C., occupied the chair, supported, amongst others, by Messrs.:—

H. Percy Boulnois
Sir H. H. Bartlett, Bart.
J. Dixon Butler
E. J. Brown, President of the Institute of Builders
C. W. Ball
Arnold Bare
T. E. Bare
H. T. A. Chidgey, Mayor of Stepney
T. Sturge Cotterell, J.P., President of the London Association of Master Stonemasons
S. Chatfeild Clarke
H. R. Cowley
H. Cubitt
E. Carless
C. Fitzroy Doll
J. E. Drower
W. E. Davis
H. A. A. Gate
A. A. Hudson
G. Hubbard
F. Higgs
A. Burnaby Howes
Ralph Knott
Walter Lawrence, jun., President of the London Master Builders' Association
Walter Lawrance
H. Riley
P. P. Caldecott Smith
Herbert Shepherd
Alderman Wm. Thompson
P. B. Tubbs, President of the Society of Architects
G. Midgley Taylor
W. E. Watson
E. P. Wells, President of the Concrete Institute

The loyal toast having been honoured,

Mr. H. Percy Boulnois, M.Inst.C.E., proposed the toast of "The Quantity Surveyors' Association," coupled with the name of the President. He said he remembered when quantity surveyors were few and far between, and the builder used to do what was required. But times had changed, and the quantity surveyor had to be alive and alert in every way. The Association was only ten years old, but during that time they had had many activities. They had tried, in the first place, for the standardisation of measurement. Standardisation was in the air. He belonged to the Engineering Standardisation Committee, and they had had many problems to consider, some of which they had solved. They found great difficulty in nomenclature, in the names of certain things, particularly in regard to roads, and the difficulty of defining the word "pitch." As to the registration of title, he hoped they would succeed in their desires. The difficulty of defining what a quantity surveyor is was felt in regard to the consulting engineers.

The President, in reply, said that quantity surveyors were little known, little understood, and little appreciated, and their names were not found on foundation-stones or in New Year's and Birthday Lists of Honours. They did not complain, for theirs was quiet, unobtrusive work. The Council of the Association had dealt with several matters of interest during the year, standardisation or uniformity of custom being one of them, and all the interests connected with the various works and trades had been considered. Slating and tiling had been dealt with, and a pamphlet had been issued. The Joint Committee of the Concrete Institute and the Association had been sitting in reference to reinforced concrete, and a Report had been issued, while a Joint Committee of the Surveyors' Institution and the Association had been sitting for some time in connection with plasterers' work. There was a great deal of difference of opinion in regard to standardisation. Mr. G. Corderoy, in a paper recently read before the Surveyors' Institution, said it was a vain quest. A rigid standardisation was a bar to progress; we were continually learning and circumstances were continually altering and surveyors were continually amending and improving and reducing and in some way simplifying their methods as far as might be, and to impose on them a cast-iron system would be regrettable. At the same time, although he recognised the dangers in connection with standardisation, he thought that the work which the various Committees were doing, and which he hoped they would continue to do, would bring together a mass of valuable and useful information. The President, having referred to several other matters, said the Council felt very strongly on the subject of local authorities asking quantity surveyors to tender for quantities. They protested strongly against this system, and he earnestly asked every member of the Association not to tender, or, if they felt compelled to do so, then to put their names before the particular authority with the scale of fees recommended by the Association for the use of such authorities. When quantity surveyors were foolish enough to fall in with the tendering system, one of two things happened: either the young, inexperienced, unqualified man did the work, or the authority took a mean advantage of one of their weak and necessitous brethren, and gave him much less than the fair value of his work. A low rate of pay was detrimental to the public interest, and would ultimately result in a lower type of man and a lower class of work. An interesting movement was taking place in the United States, where quantity surveying as a profession was not known, for contractors had the drawings and specifications, and they made up their tenders, or, as the Americans said, "figured their bid," as they felt inclined, with the result that the employer practically paid for the expense of a dozen sets of estimates, it might be. The tenders were more or less of a gamble, and the man who left out most got the job, and many disputes followed as a result. Mr. Alexander Wright, an Englishman, brought up in the office of one of their Past-Presidents, had been bringing before the architects and builders of America the benefit of the quantity surveyors' system, and he had visited twenty-seven large cities, and had given addresses and attended conferences. Mr. Wright had also started an Association of Quantity Surveyors in the States, and had brought out a monthly journal called the *Quantity Surveyor*.

Mr. T. E. Bare, London Vice-President of the Association, then proposed the toast of "The Architects." He referred to the difficulties architects had to contend with and to the responsibilities of their work, and also to the arduous conditions which building imposed on

(*Continued on page 178.*)

List of Competitions, Contracts, etc.

For some contracts still open, but not included in this List, see previous issues. **Those with an asterisk (*) are advertised in this number:** Competitions, iv.; Contracts, iv. vi. viii. x.; Public Appointment, xxiii.; Auction Sales, xxviii. Certain conditions beyond those given in the following information are imposed in some cases, such as: the advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

*** It must be understood that the following paragraphs are printed as news, and not as advertisements; and that while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur.

Competitions.

* FEBRUARY 18.—**Weymouth.**—WORKING-CLASS HOUSES.—The B.C. of Weymouth and Melcombe Regis invite competitive designs for erection of working-class houses. Three per cent. on amount of accepted tender for design adopted, and two premiums of £10 and £5 respectively for designs placed second and third.

MARCH 2.—**Hendon, N.W.**—The Hendon U.D.C. invite architects to submit designs in competition for the erection of public baths at The Burroughs, Hendon. Premiums, £100, £75, and £50 respectively. See advertisement in issue of January 9.

MARCH 20.—**Belfast.**—ART GALLERY AND MUSEUM.—The Belfast Corporation invite designs for above buildings. Total cost not to exceed £75,000, of which only £30,000 will be spent at once. Assessor, Mr. John J. Burnet, A.R.S.A., LL.D. See advertisement in issue of November 7.

APRIL 1.—**Sofia.**—DESIGNS FOR A ROYAL PALACE AND LAW COURTS.—Particulars from the Commercial Intelligence Branch of the Board of Trade, Basinghall-street, E.C. See page 173, August 9, and page 350, September 27, 1912; also page 708, June 20.

APRIL 2.—**Ottawa.**—DEPARTMENTAL AND COURTS BUILDINGS.—The Department of Public Works, Ottawa, invite architects to submit sketch designs in a preliminary competition for above buildings. Six will be chosen from these for final competition. The five unsuccessful competitors will receive $3,000. The winner will be entrusted with the work. See particulars in issue for September 19 and advertisement in issue of September 12.

MAY 4.—**London.**—ST. PAUL'S BRIDGE.—The Bridge House Estates Committee of the Corporation of London invite designs from British architects for the architectural treatment of St. Paul's Bridge. Premiums, £300, £200, and £100 respectively. The assessor is Sir William Emerson, P.P.R.I.B.A. See advertisement in issue of December 12.

* MAY 15.—**Home Counties.**—LABOURERS' COTTAGES.—The proprietors of *Concrete and Constructional Engineering* invite designs for labourers' cottages. Premiums 100 guineas, 50 guineas, and 25 guineas respectively, and two at 10 guineas each.

JUNE 20.—**Orillia.**—MONUMENT.—The Executive Committee of the Champlain Tercentenary Committee invite competitive designs for a monument to Samuel de Champlain. Not to cost more than £4,100. See advertisement in issue of January 16.

JANUARY 15, 1915.—COLLEGE MEMORIAL LECTURE HALL.—Designs for the Alexander Thompson Travelling Studentship must be delivered by the above date.

Contracts.

BUILDING.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

FEBRUARY 7.—**Stafford.**—LAUNDRY.—Builders in the counties of Stafford and Salop desirous of tendering for the erection of a new laundry building at the Staffordshire General Infirmary, Stafford, should send for quantities to Mr. Henry T. Sandy, architect, Stafford. Deposit, £1 1s.

FEBRUARY 9.—**Blyth.**—WORKSHOPS, ETC.—The erection of new workshops and stores at Blyth, comprising three brick buildings, each about 70 ft. by 37 ft., with reinforced concrete floors, for the Blyth Harbour Commissioners. Quantities, etc., of Mr. C. E. Baldwin, secretary and general manager, Blyth Harbour Commissioners, Blyth. Deposit, £1 1s.

FEBRUARY 9.—**Dorchester.**—HOUSES.—Erection of semi-detached houses, Victoria Park Estate, Dorchester. Quantities of Messrs. Jackson, Son, & Feacey, architects, 26, South-street, Dorchester. Deposit, 10s. 6d.

FEBRUARY 9.—**Gleneagles.**—HOTEL.—The execution of the digger-work, brickwork, and steel-Gleneagles, Perthshire. Quantities of the architect, Mr. James Miller, A.R.S.A., 15, Blythswood-square, Glasgow. Deposit, £2 2s.

FEBRUARY 9.—**Llanberis.**—RENOVATION, ETC.—For renovation and conversion of the Old Valley Hotel, Llanberis, into business premises and dwelling-house, and repairs to cottages for Governors of Ruthin's Charities. Specification of Mr. J. W. Roberts, architect, 36, High-street, Pwllheli.

FEBRUARY 10.—**Boston.**—BRIDGE REPAIRS.—Repair of White Bridge, Skirbeck Quarter, for Boston R.D.C. Specification of Mr. H. Kidd, Solent House, Kirton.

FEBRUARY 10.—**Cork.**—BUSINESS PREMISES.—Erection of premises and other works at Buckingham-place, George's Quay, Cork, for Messrs. T. R. Holland & Co. Quantities, etc., of Mr. J. F. M'Mullen, architect, 30, South Mall, Cork.

FEBRUARY 10.—**Newton Abbot.**—HOSPITAL EXTENSION.—Extension of the Newton Abbot Hospital for the Committee. Quantities, etc., of Mr. J. C. Beare, architect, Newton Abbot. Deposit, £1 1s.

FEBRUARY 10.—**Spalding.**—COTTAGES.—Erection of three pairs of cottages at Capes Entry, two pairs at Westhorpe, and two pairs near Belnie Bridge for the Spalding R.D.C. Quantities of Mr. W. H. H. Davis, architect, 6, Double-street, Spalding.

FEBRUARY 11.—**Cardiff.**—PREMISES.—For new premises, The Hayes, Cardiff, for Mr. Peter Halewood. Quantities from Mr. Sidney Williams, Licentiate R.I.B.A., architect, Wharton-street, Cardiff. Deposit, £1 1s.

FEBRUARY 11.—**Carlow.**—ADDITIONS.—Erection of buildings containing sanitary, etc., accommodation at Carlow District Lunatic Asylum. Quantities, etc., of Mr. T. A. Greene, Resident Medical Superintendent, at the Asylum. Deposit, £2 2s.

FEBRUARY 11.—**Crompton.**—SHELTER, ETC.—Bowling green shelter and pavilion for the Crompton U.D.C. Particulars of the Surveyor, Town Hall, Shaw, near Oldham. Deposit, £1 1s.

FEBRUARY 11.—**Sheffield.**—ADDITIONS.—Erection of new children's department and connecting corridor at the Union Hospital, Firvale, and for the construction of permanent roads, in accordance with plans, etc., by Messrs. Potter & Sandford, architects, 16, St. James's-row, Sheffield, where they may be seen. Names to Mr. Albert E. Booker, Clerk to Sheffield Guardians, Union Offices, Westbar, Sheffield.

* FEBRUARY 11.—**Shirley, Southampton.**—NEW BUILDINGS.—The Committee of Shirley Baptist Church invite builders wishing to tender for a new building to send in their names.

FEBRUARY 11.—**Tough.**—ADDITIONS.—Various trades of additions to the Tough public school, to accommodate the cookery and woodwork departments. Specifications with Messrs. D. & J. R. M'Millan, architects, 105, Crown-street, Aberdeen.

FEBRUARY 12.—**Bollington.**—PUMPING STATION.—Erection of a small pumping station at Dane Bent, Rainow, for the Bollington U.D.C. Specification, etc., at the Council Offices, Bollington.

FEBRUARY 12.—**Ebbw Vale.**—DRILL HALL.—Erection of a drill hall at Ebbw Vale for the 3rd Batt. the Monmouthshire Regiment. Quantities from the architects, Messrs. Habershon, Fawckner, & Co., F.R.I.B.A., 41, High-street, Newport, Mon. Deposit, £1 1s.

FEBRUARY 12.—**Egremont.**—SCHOOLS.—Various works required in erection of Sunday schools for St. Mary's Church, Egremont. Quantities of Mr. J. H. Martindale, F.R.I.B.A., Eaglesfield Abbey Rooms, Castle-street, Carlisle.

FEBRUARY 12.—**Leeds.**—TRANSFORMER CHAMBERS.—Construction of (*a*) an extension of a transformer chamber at 1, Whitehall-road, and (*b*) the construction of a transformer chamber (overground) at Stanningley Park for Leeds Corporation. Specifications, etc., at 1, Whitehall-road, Leeds.

FEBRUARY 12.—**Ulverston.**—OFFICES.—Various branches of work required in building new offices at the Mart of the Ulverston and North Lonsdale Auction Mart Company. Specifications of Messrs. J. W. Grundy & Son, architects, Brogden-street, Ulverston.

FEBRUARY 13.—**Coseley.**—TILING.—Retiling roofs at Hurst Hill Council schools for the Coseley E.C. Specifications of the architects, Messrs. Ewen Harper, Bro., & Co., Ruskin-chambers, Corporation-street, Birmingham. Deposit, 10s. 6d.

FEBRUARY 13.—**Dundalk.**—ALTERATIONS, ETC.—New wood flooring, with encaustic tiling to nave, aisles, and porches, also for alterations to nave benches of St. Patrick's Church, Dundalk, for the Very Rev. Father Lyons, Adm. Specification, etc., of Messrs. Ashlin & Coleman, architects, 7, Dawson-street, Dublin.

FEBRUARY 14.—**Granton.**—STORES, ETC.—Reconstructing stores, erecting new buoy store, smithy, etc., and laying down rails at Granton for the Commissioners of Northern Lighthouses. Quantities, etc., of the Engineer to the Commissioners, 84, George-street, Edinburgh. Deposit, £1 1s.

FEBRUARY 14.—**Iron Bridge.**—DRILL HALL.—Drill hall and stores at the Mount, Iron Bridge, for the Shropshire Territorial Force Association. Quantities of the architect, Mr. John Butters, Castle-square, Ludlow. Deposit, £1 1s.

FEBRUARY 14.—**Longhoughton.**—HOUSE.—Erecting a stationmaster's house at Longhoughton for the North Eastern Railway Company. Information from Mr. William Bell, the company's architect, at York.

FEBRUARY 14.—**Monmouthshire.**—SCHOOLS.—Erection of the following new schools:—(1) At Tre Thomas, Bedwas, Mon., to accommodate 800 children, together with a manual training centre; (2) at Abercarn, Mon., to accommodate 400 children, together with a manual training centre; (3) at Llanvair Discoed (between Wentwood and Caerwent), Mon., to accommodate sixty children, for the Monmouthshire E.C. Quantities of Mr. John Bain, F.R.I.B.A., County Council Offices, Newport. Deposit, £1 1s. in each case.

FEBRUARY 14.—**Shotton Colliery.**—HOUSES.—Erection of twenty houses at Shotton Colliery. Specification of Mr. James Hamilton, Colliery Offices, Horden Colliery.

* FEBRUARY 16.—**Chester.**—ALTERATIONS AND ADDITIONS.—The Visitors of Upton Asylum, Chester, invite tenders for alterations to old female wards and alterations and additions to chapel.

FEBRUARY 16.—**Glamorgan.**—SCHOOLS.—For (1) additions to the infants' school at Cefn Cribbwr; (2) new school at Loughor; (3) new secondary school at Maesteg for the Glamorgan C.C. Quantities for No. 2 at Loughor Police-station, and for No. 3 at the Maesteg Police-station.

FEBRUARY 16.—**Glasgow.**—EXTENSION OF TRAMWAY OFFICES.—Various works required in connection with the proposed alterations and extensions to the head office premises at 46, Bath-street. Specifications, etc., of Mr. Frank Burnet, F.S.I., 180, Hope-street, Glasgow. Deposit, £1 1s.

* FEBRUARY 16.—**Hendon.**—ARTISANS' DWELLINGS.—Erection of fifty artisans' dwellings at Child's-hill for the Hendon U.D.C. Specifications, etc., of Mr. George Hornblower, 2, Devonshire-terrace, Portland-place, London, W. Deposit, £3 3s.

FEBRUARY 16.—**St. Austell.**—INFIRMARY.—Erection of new workhouse infirmary, St. Austell, for the R.G. Quantities, etc., of Mr. B. C. Andrew, M.S.A., architect, St. Austell. Deposit, £2 2s.

FEBRUARY 16.—**Swansea.**—SCHOOL.—Erection of temporary school to accommodate 495 scholars for the Swansea E.C. Quantities of Mr. E. E. Morgan, Borough Architect, 3, Prospect-place, Swansea. Deposit, £1 1s.

FEBRUARY 17.—**County of Durham.**—SCHOOLS.—For new Council school at Felton-lane (for about 960 scholars). Alterations and additions at Oxhill, Newton Cap, Spennymoor Higher Elementary, Westgate, and Wearhead Council schools, for the Durham C.C. Quantities obtained as follows:—(1) For Felton-lane, Oxhill, Newton Cap, Spennymoor H.E. schools, at the office of Mr. W. Rushworth, Shire Hall, Durham; (2) for Westgate and Wearhead schools, at the office of Mr. N. Richley, Shire Hall, Durham.

FEBRUARY 18.—**Herne Bay.**—WIND-SCREEN.—Erection of wind-screen at East Cliff bandstand for the U.D.C. Particulars of the Surveyor, Town Hall, Herne Bay.

FEBRUARY 19.—**Bradford.**—BATTERY-ROOM.—For (*a*) building a battery-room at Valley-road Electricity Works, and (*b*) supplying and erecting the constructional iron and steelwork for the foregoing building, for the Bradford Corporation. Quantities from Mr. Thomas Roles, City Electrical Engineer and Manager, Electricity Offices, Town Hall, Bradford. Deposit, £1 1s.

FEBRUARY 19.—**Penychain.**—RIFLE RANGE.—Construction of a rifle range and works connected therewith at Penychain, near Afonwen, for the Carnarvonshire Territorial Force Association. Specification of the architect, Mr. E. Evans, 8, Castle-street, Carnarvon.

[Those with an asterisk (*) are advertised in this issue.]

BUILDING—*continued.*

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

FEBRUARY 21.—**Partridge Green.**—SCHOOL ADDITIONS.—For additions to the West Grinstead (Joiesfield C.E.) Schools, Partridge Green, Sussex. Quantities of Mr. E. H. Lingen Barker, architect, 4, Moscow-court, London, W.

FEBRUARY 23.—**Carstairs.**—STATION BUILDINGS.—Construction of station buildings and relative works at Carstairs for the Caledonian Railway Company. Schedule of the company's engineer, Buchanan-street Station, Glasgow. Deposit, £2 2s.

* FEBRUARY 23.—**Cowes.**—SUNDAY SCHOOL.—The Vicar, Churchwardens, and Building Committee of Holy Trinity Church, Cowes, I.W., invite tenders for the erection of a Sunday school.

FEBRUARY 25.—**Clonmel.**—RETORT HOUSE, ETC.—Erection of a retort house and coal store in concrete, or alternately in stone, at Gas Works in Clonmel of the Corporation. Specification from the Engineer, Mr. Henry O'Connor, A.M.Inst.C.E., 1, Drummond-place, Edinburgh. Deposit, £1 1s.

* FEBRUARY 25.—**Tottenham.**—TAKING DOWN AND REBUILDING.—The Metropolitan Asylums Board invite tenders for taking down and re-erecting existing buildings at the North-Eastern Fever Hospital.

* FEBRUARY 25.—**Walthamstow.**—CONCRETE TANK.—The Walthamstow U.D.C. invite tenders for construction of a concrete tank for a cooling tower.

* FEBRUARY 27.—**Lydd Dungeness.**—CLOAKROOMS, ETC.—The Kent E.C. invite tenders for the erection of cloakrooms, etc.

NO DATE.—**Greenfield.**—BUSINESS PREMISES.—Various trades required in the erection of new branch premises for the Greenfield Co-operative Society, Ltd. Names to the architect's department, Co-operative Wholesale Society, Ltd., 1, Balloon-street, Manchester. Deposit, £1 1s.

NO DATE.—**Longton.**—PICTURE PALACE.—Erection of a picture palace fronting to Upper Normacot-road and Herbert-road, in Normacot, Longton. Names to the architects, Messrs. Nagington & Shennan, 35, Dale-street, Liverpool.

NO DATE.—**Scarborough.**—EXTENSIONS, ETC., BAKERY, ETC.—Erection of new bakery and extension to central premises for the Scarborough and District Co-operative Society, Ltd. Names to the architect's department, the Co-operative Wholesale Society, Ltd., 1, Balloon-street, Manchester. Quantities, deposit, £2 2s.

ENGINEERING, IRON, AND STEEL.

FEBRUARY 9.—**Chesterfield.**—TELEPHONES.—For overhauling and putting in order, etc., the telephones at the Penmore Hospital for the Chesterfield Joint Hospital Committee. Particulars of Mr. J. Middleton, 24, Gluman-gate, Chesterfield.

FEBRUARY 10.—**Bristol.**—ROOFING.—Erection of steel and corrugated-iron roofing at Temple Meads Goods Station, Bristol, for the Great Western Railway. Quantities at the office of the Engineer at Paddington Station.

FEBRUARY 10.—**Cardiff.**—PLATFORMS.—Construction of platforms for movable bridges and other works at Newtown Goods Yard, Cardiff, for the Great Western Railway Company. Quantities, etc., at the office of the Engineer at Newport Station.

FEBRUARY 10.—**Manchester.**—CRANE.—Supply and erection of one 7½-ton overhead hand-power travelling crane, operated from floor level, and gantries for the Corporation. Specifications, etc., of Mr. F. E. Hughes, Secretary, Electricity Department, Town Hall, Manchester. Deposit, £1 1s.

FEBRUARY 10.—**Stourbridge.**—GAS MAINS.—For supply of 8-in. and 4-in. gas mains for the Stourbridge U.D.C. Particulars of Mr. C. H. Webb, Engineer, Gasworks, Stourbridge.

FEBRUARY 11.—**Belfast.**—TURNTABLES.—Supply and erection on the Queen's Quay and/or Abercorn Basin, Belfast, of one or two turntables for heavy travelling cranes, for the Belfast Harbour Commissioners. Information from the Harbour Engineer, Mr. W. Redfern Kelly, M.Inst.C.E., Belfast.

FEBRUARY 11.—**Greenock.**—CRANE.—For a 150-ton electric crane, to be erected on the south quay of the James Watt Dock, for the Greenock Harbour Trust. Specification at the Engineer's Office, Municipal Buildings, Greenock. Deposit, £1

FEBRUARY 12.—**Bristol.**—ELECTRICITY STORES.—For a twelve months' supply of (*a*) arc lamp carbons; (*b*) joint, junction, and fuse boxes; (*c*) A.C. wattmeters; (*d*) D.C. mercury type ampere-hour meters, for Bristol Corporation. Specification of Mr. H. Faraday Proctor, M.Inst.C.E., M.Inst.E.E., Engineer and General Manager, Corn-street, Bristol. Deposit, £2 2s.

FEBRUARY 12.—**Liverpool.**—TRAMWAY EQUIPMENT.—Supply and delivery of about 100 standard traction 40-h.p. double-motor equipments for the Corporation. Forms of tender of Mr. C. W. Mallins, General Manager, Corporation Tramways, 24, Hatton-garden, Liverpool.

* FEBRUARY 12.—**St. George's-in-the-East.**—10-B.H.P. MOTOR.—The Guardians of the parish of St. George's-in-the-East invite tenders for a 10-b.h.p. motor, fixed complete.

FEBRUARY 13.—**Barking.**—FENCING.—Supply and erection of about 330 lin. yds. wrought-iron fencing, and for the taking-down and re-erection of about 180 lin. yds. of old wrought-iron fencing at the Rippleside Cemetery, Barking, for the U.D.C. Specification, etc., from Mr. C. F. Dawson, Surveyor to the Council, Public Offices, Barking.

FEBRUARY 14.—**Westonzoyland.**—BOILER.—Construction, supplying, fixing, including all necessary brick, concrete, and other work, and maintaining for a period of six months after the trial run, at their pumping-station at Westonzoyland, about 4½ miles from Bridgwater, of a steel Lancashire boiler, 22 ft. long by 6 ft. 8 in. in diameter, for the Othery, Middlezoy, and Westonzoyland Drainage Board. Specification of Mr. Wm. Lunn, M.Inst.C.E., 65, Wembdon-road, Bridgwater. Deposit, £2 2s.

FEBRUARY 16.—**Croydon.**—ELECTRICITY STORES.—Supply of house fuse cut-outs, service and other boxes, meters, etc., lamp-posts and bracket arms, H.T. and L.T. plug fuses, feeder pillars, pathway frames and covers, for Croydon Corporation. Specifications from the Manager of the Electricity Works, Factory-lane, Croydon.

FEBRUARY 17.—**Brockley.**—ELECTRIC LIGHTING.—Electrical installation at the County Secondary School, Hilly Fields, Brockley, S.E., comprising 223 wiring points, with 312 lights, for the London C.C. Specification, etc., of Mr. J. W. Humphreys, at the County Hall, Spring-gardens, S.W. Deposit, £1.

FEBRUARY 17.—**London.**—SLUICE VALVES.—Supply of full-way gate sluice valves during a period of three years from April 1, 1914, for H.M. Commissioners of Works. Particulars of the Storekeeper, H.M. Office of Works' Stores, 12, Lambeth Palace-road, London, S.E.

FEBRUARY 17.—**Maesteg.**—RIVER WORKS.—Construction of river retaining wall and contingent works, for the Maesteg U.D.C. Quantities, etc., of Mr. Samuel J. Harpur, M.Inst.C. and M.E., the Engineer to the Council, 32, Commercial-street, Maesteg. Deposit, £1 1s.

FEBRUARY 17.—**Manchester.**—TRAMWAY STORES.—Supply of stores to the tramway depôt of the Manchester Corporation. Schedules of Mr. J. M. McElroy, General Manager, 55, Piccadilly, Manchester.

FEBRUARY 23.—**Carstairs.**—RAILWAY WIDENING.—Construction of railway widening works at Carstairs for the Caledonian Railway Company. Schedule at the office of the company's engineer, Buchanan-street Station, Glasgow. Deposit, £2 2s.

FEBRUARY 23.—**Hornsey.**—ELECTRICITY STORES.—For (1) electricity meters; (2) cables, cable stores, etc., for Hornsey T.C. Forms of tender of the Borough Electrical Engineer, at the Electricity Works, Tottenham-lane, Hornsey, N. Deposit, 10s. 6d.

FEBRUARY 24.—**Tullibody.**—BRIDGE.—Construction of a diversion of part of the road between Alloa and Stirling, including a new bridge over the river Devon, near Tullibody, about half a mile by road from Cambus Station on the North British Railway, for the C.C. of Clackmannan. Quantities of Messrs. Blyth & Blyth, C.E., 135, George-street, Edinburgh. Deposit, £1 1s.

FEBRUARY 25.—**Pelton Lane.**—BRIDGE, ETC.—Construction of a bridge under the Pontop and South Shields Railway at Pelton Lane, and the making of a new roadway, for the North-Eastern Railway Company. Quantities of the Company's Chief Engineer, Mr. Charles A. Harrison, Forth Banks, Newcastle-on-Tyne.

NO DATE.—**Llanelly.**—DRIFT.—For driving drift 8 ft. by 6 ft. through coal dipping 12 in. in yd. for 80/100 yds. for Ffosfach Colliery Company, Ltd., Castle-buildings, Llanelly.

FURNITURE, PAINTING, MATERIALS, etc.

FEBRUARY 9.—**Beverley.**—STONE.—Supply of about 3,000 to 4,000 tons of stone for macadamising roads, for the Beverley D.C. Particulars of Mr. E. Picker, C.E., Surveyor, Beverley.

FEBRUARY 9.—**Birkenhead.**—MATERIALS.—Supply of materials for the Corporation of Birkenhead, including red bricks, Portland cement, hydraulic lime, iron castings, stoneware pipes, wrought iron, creosote oil, pitch tar, etc. Specifications of Mr. Charles Brownridge, M.Inst.C.E., Borough Engineer and Surveyor, Town Hall, Birkenhead.

FEBRUARY 9.—**Birkenhead.**—PAVING MATERIAL.—Supply of granite and Rawtenstall kerbs and channels, Penmaenmawr breaking stone, natural flags, granite, paving setts, and creosoted red deal paving blocks for the Corporation. Specifications of Mr. Charles Brownridge, M.Inst.C.E., Borough Engineer and Surveyor, Town Hall, Birkenhead.

FEBRUARY 9.—**Hendon.**—ARTIFICIAL STONE.—Supply of approved artificial stone for footway paving for the Hendon U.D.C. Particulars from Mr. S. Slater Grimley, M.Inst.C.E., Engineer and Surveyor to the Council, Council Offices, Hendon, N.W. Deposit, £5.

FEBRUARY 9.—**London.**—FIRE APPLIANCES.—Supply of fire appliances during a period of three years from March 1, 1914, for Commissioners of H.M. Works. Particulars on application to the Storekeeper, H.M. Office of Works Stores, 12, Lambeth Palace-road, London, S.E.

FEBRUARY 9.—**Northampton.**—GRANITE.—Supply of broken granite, delivered at various stations and wharves in the county, for the Northamptonshire C.C. Mr. C. S. Morris, County Surveyor, County Hall, Northampton.

FEBRUARY 9.—**Southgate.**—MATERIALS.—For one year's supply of materials, including granite, paving materials, hardcore, tar-macadam, etc., and bitumen, tar, glazed socketed stoneware pipes, Portland cement, cast and wrought iron goods, etc., for the U.D.C. Specifications of Mr. C. G. Lawson, C.E., the Council's Surveyor, Council Offices, Palmer's Green, N.

FEBRUARY 10.—**Paddington.**—PAINTING, ETC.—Cleaning and repainting station buildings, etc., at the following places: (1) Dorchester, Weymouth, etc.; (2) Bridgwater, etc.; (3) Minehead, Barnstaple, etc.; (4) Tetbury, Drybrook, etc.; (5) Tram Inn, Abergavenny, etc.; (6) Newton Abbot, Torquay, etc.; (7) Launceston, Plymouth, etc.; (8) Plymouth (DOCKS), Saltash, etc.; (9) Par, Camborne, etc., for the Great Western Railway Company. Quantities at the office of the Engineer at Taunton for contracts Nos. 1 to 3, at Gloucester for contracts Nos. 4 and 5, and at North-road, Plymouth, for contracts Nos. 6 to 9, between the hours of 10 a.m. and 4 p.m. Tenders to Mr. A. E. Bolter, Secretary, Paddington Station, London.

FEBRUARY 10.—**Selby.**—WHINSTONE.—Supply of whinstone for one year for the Selby U.D.C. Mr. Bruce McG. Gray, A.M.Inst.C.E., Engineer and Surveyor, Council Offices, Selby.

FEBRUARY 10.—**Towcester.**—ROAD MATERIALS.—Supply of granite and slag for the year ending March 31, 1915, for the R.D.C. Particulars of Mr. W. Sheppard, of Towcester, Surveyor to the Council.

FEBRUARY 11.—**Battersea.**—MATERIALS.—One year's supply of materials to the B.C., including paints, etc., enamels, etc., sundries, varnish, tools, ironmongery, etc., macadam and chippings, road materials, etc. Forms of tender at the Town Hall, Battersea.

FEBRUARY 11.—**Leeds.**—PAINTING.—Cleaning down, painting, etc., at various police-stations in the city, for the Corporation. Schedules of work of Mr. W. T. Lancashire, City Engineer, Municipal-buildings, Leeds.

FEBRUARY 11.—**Newport.**—STORES, ETC.—Materials for one year from April 1, 1914, including limestone macadam, granite macadam, cement, mortar, drain pipes, bricks, paints, oils, etc., ironmongery, Kero, channelling, and paving, lamp columns and crane, timber and slates, sanitary ironwork, etc. Forms at the Borough Engineer's Office, Town Hall, Newport, Mon.

FEBRUARY 11.—**Plymouth.**—PAINTING.—Painting of the new Workhouse Infirmary, in the following sections:—(1) The whole of the inside and outside; (2) the inside only; (3) the outside only; (4) the nurses' home, for the Board of Guardians. Quantities may be seen at the Clerk's Office, Greenbank-road, Plymouth.

FEBRUARY 12.—**Bournemouth.**—MATERIALS.—Year's supply of materials for various committees of the Corporation, including tools, road material, sanitary materials, etc. Particulars of Mr. F. W. Lacey, Surveyor, Bournemouth.

FEBRUARY 12.—**Chelmsford.**—TAR-MACADAM.—Supply during one year commencing March 1 next of such quantity of tar-macadam as may be required by the Corporation. Forms of tender of Mr. George Melvin, Town Clerk, Municipal Offices, Chelmsford.

FEBRUARY 12.—**Prestwick.**—CLEANING.—For cleaning the ceilings in the wards and the corridors at the Booth Hall Infirmary, Charlestown-road, Blackley, for the Prestwick Board of Guardians. Specifications of the Steward, or of Mr. Edward W. Ogden, Clerk, Union Offices, Cheetham Hill-road, Manchester.

FEBRUARY 12.—**Wigan.**—PAINTING.—For painting and decorating of the superintendent's house at the Pemberton Police-station. Specification, etc., from the Borough Engineer, King-street West, Wigan.

FEBRUARY 13.—**Cardiff.**—WATERWORKS' STORES.—For (1) stores—only from firms having places of business in Cardiff, for stores for the twelve months ending March 31, 1915; (2) street surface covers—from founders for various cast-iron street surface covers, stop-tap covers, etc., that may be required during twelve months or three years; (3) jobbing mason's work—mason and bricklayer's work required in the building of hydrant tanks, meter tanks, and the relaying of paving, etc., for the twelve months ending March 31, 1915. Specifications of Mr. C. H. Priestley, M.Inst.C.E., Waterworks Engineer, City Hall, Cardiff.

FEBRUARY 13.—**Great Yarmouth.**—MATERIALS.—Supply of twelve months' materials for the Corporation, including ironmongery, stoneware pipes, paints, etc. Specification of Mr. J. W. Cockrill, Borough Surveyor, Town Hall, Great Yarmouth.

FEBRUARY 13.—**Hamilton.**—TAR.—Supply of tar and tar-macadam from May 15, 1914, to May 15, 1915, for the County of Lanark. Specification from the Road Surveyors, at their offices at Strathaven, Hamilton, and Airdrie. Mr. W. E. Whyte, District Clerk, Hamilton.

FEBRUARY 13.—**Keynsham.**—GRANITE.—Supply of granite or basalt for the year ending March 31, 1915, for the Keynsham R.D.C. Specifications of Mr. J. Johnson, Surveyor of Highways, Keynsham, Bristol.

FEBRUARY 14.—**Blackburn.**—STORES.—For year's supply of stores to electricity department of the Corporation. Specifications (3s. per section, of which there are nine) of Mr. P. P. Wheelwright, Borough Electrical Engineer, Blackburn.

FEBRUARY 14.—**Bury.**—MATERIALS.—One year's supply of materials for the Corporation, including earthenware pipes, Portland cement (English), setts, kerbs (Rossendale, not granite), and flags (Rossendale, not concrete); granite setts, limestone chippings (grey), pitch and creosote oil, seconds plastic engineering bricks. Specifications of the Borough Surveyor.

FEBRUARY 14.—**Dorking.**—TAR.—Supply of distilled tar, tarvia, or other compounds for use in tar-spraying roads during the season 1914, for the Dorking U.D.C. Mr. W. J. Hodges, Clerk to the Council, Council Offices, Dorking.

FEBRUARY 14.—**Plaxton.**—ROAD MATERIAL.—Supply of whinstone, broken and unbroken; also for broken annealed and common slag, for the R.D.C. Forms of tender of Mr. Joseph Peters, Clerk, 4, New-street, York.

[Those with an asterisk (*) are advertised in this issue.]

FURNITURE, etc.—*continued.*

The date given at the commencement of each paragraph is the latest date when the tender or the names of those willing to submit tenders, may be sent in.

FEBRUARY 14.—**Headington.**—ROAD MATERIALS.—Supply of Hartshill or other approved stones for the R.D.C. Tender forms from the District Surveyor, Mr. A. Walker, Windmill-road, New Headington.

FEBRUARY 14.—**Kingsbury.**—MATERIALS.—Supply for one year of road materials for the U.D.C. Specifications of Mr. R. C. N. Newport, Surveyor, Council Offices, Kingsbury, N.W.

FEBRUARY 14.—**Southampton.**—MATERIALS.—Twelve months' supply of materials for the Southampton Harbour Board, including timber, ironmongery, cement, electrical stores, paints, oils, etc. Schedules at the offices of the Board, Town Quay, Southampton.

FEBRUARY 14.—**Warrington.**—MATERIALS.—Twelve months' supply of materials for the Corporation, including concrete flags, Rawtenstall or York flags, Rawtenstall kerbs, blue bricks, chequered tiles, sewer pipes, bends, junctions, etc., macadam and chippings, limestone chippings, Portland cement, cast-iron gullies, etc. Mr. Andrew M. Ker, Borough Engineer and Surveyor.

FEBRUARY 16.—**Eccles.**—MATERIALS.—Year's supply of materials for the Corporation, including road materials paving materials, etc. Particulars of Mr. Thomas S. Picton, Borough Surveyor, Eccles.

FEBRUARY 16.—**Louth.**—ROAD MATERIAL.—Supply of 10,000 tons of granite and 4,000 tons of slag for the R.D.C. Forms of tender of Mr. F. C. Chard, Clerk, Council House, Louth.

FEBRUARY 16.—**Newport.**—TRAMWAY, ETC., STORES.—Supply for one year of stores for the tramway and electricity departments of the Corporation. Schedules of the General Manager, Town Hall, Newport, Mon.

FEBRUARY 17.—**Barrow-in-Furness.**—MATERIALS.—Supply of fire bricks, cast-iron pipes, wrought-iron tubes and fittings, brass cocks, gas meters, gas cookers, oil, lime, ironmongery, and sulphuric acid, for the Corporation. Tender forms at the office of the Manager of the Gas and Waterworks.

FEBRUARY 17.—**Birmingham.**—MATERIALS.—Supply of iron and steel ware, belting, timber, brushes, and miscellaneous stores for the Corporation. Specifications of the Superintendent, Montague-street Wharf, Birmingham.

FEBRUARY 17.—**London.**—HYDRANTS, ETC.—Supply of (1) fire and ground hydrants; (2) hit and miss ventilators; (3) fire and sand pails, etc., during a period of three years from April 1, 1914, for Commissioners of H.M. Works. Particulars of the Storekeeper, H.M. Office of Works, Stores, 12, Lambeth Palace-road, London, S.E.

FEBRUARY 17.—**Portsmouth.**—TRAMWAY STORES.—For year's supply of stores for the Tramways Committee of the Corporation. Specification of Mr V. G. Lironi, Engineer's Offices, Frattongrove, Portsmouth.

FEBRUARY 17.—**Rhondda.**—METERS.—Supply of consumers' electric supply meters for the Rhondda U.D.C. Specification, etc., of Messrs. Robert Hammond & Son, Consulting Engineers to the Council, 64, Victoria-street, Westminster. Deposit, £1 1s.

FEBRUARY 17.—**Shoreditch.**—MATERIALS, ETC.—One year's supply of road materials, pipes, timber, lime, cement, etc. Mr. J. A. D. Milne, Town Clerk, Shoreditch Town Hall, Old-street, E.C.

FEBRUARY 17.—**Southport.**—MATERIALS.—Supply of materials, etc., for twelve months ending March 31, 1915, including bricks, footway tiles, etc.; ironmongery, plumbers' sundries, and glass; oils, colours; Portland and Roman cements, road materials, etc. Specifications of Mr. A. E. Jackson, A.M.Inst.C.E., Borough Engineer and Surveyor, Town Hall, Southport.

FEBRUARY 17.—**Turton.**—MATERIALS.—For materials for one year for the Turton U.D.C., including road materials, oils, concrete flags, ironmongery, etc. Particulars of the Surveyor, Council Offices, Bromley Cross, near Bolton.

FEBRUARY 18.—**Halifax.**—STORES.—Materials for the gas department of the Corporation, including lime, ironmongery, fittings, pipes, etc. Forms of tender of Mr. W. B. McLusky, Engineer, Gasworks, Halifax.

FEBRUARY 18.—**Southwark.**—MATERIALS.—For supply for one year of materials for the Borough of Southwark. Specifications at the Town Hall, Walworth-road, S.E.

FEBRUARY 18.—**Stafford.**—MATERIALS.—Year's supply of materials for the Corporation, including ironmongery, tools, etc., timber, castings, water fittings, sanitary pipes, cement and limes, bricks, paving setts, road stone, ironstone furnace slag, etc. Forms of tender of Mr. W. Plant, A.M.Inst.C.E., Borough Engineer, Borough Hall, Stafford. Deposit, 5s.

FEBRUARY 19.—**Birmingham.**—PAINTING.—Painting, etc., of the exterior and interior of the Market Hall, High-street, for the Corporation. Specification, etc., of Mr. Henry E. Stilgoe, M.Inst.C.E., City Engineer and Surveyor, Council House, Birmingham. Deposit, £1.

FEBRUARY 19.—**Croydon.**—MATERIALS.—Supply to the R.D.C. for one year of road, paving, sanitary, and other materials, cement, etc. Particulars of the Surveyor, Council Offices, Katharine-street, Croydon.

FEBRUARY 20.—**Manchester.**—STORES.—Supply of cleaning material and miscellaneous goods required at the various police-stations for the ensuing three years, for the Manchester Corporation. Particulars of the Storekeeper, Central Police Stores, King-street West, Manchester.

FEBRUARY 23.—**Belfast.**—ELECTRICAL STORES.—Twelve months' supply of stores for the tramways and electricity department. Particulars of Mr. T. W. Bloxham Electrical Engineer, East Bridge-street, Belfast.

* FEBRUARY 23.—**Bromley.**—MATERIALS, ETC.—The Bromley B.C. invite tenders for supply of various materials, etc.

FEBRUARY 23.—**London.**—GLUE.—Supply of glue during a period of three years from April 1, 1914, for Commissioners of H.M. Works. Particulars of the Storekeeper, H.M. Office of Works' Stores, 12, Lambeth Palace-road, London, S.E.

FEBRUARY 25.—**Southend.**—MATERIALS.—Supply of articles for one year from April 1, 1914, including stoneware pipes, bends, etc.; flints, bricks, gravel, sand, etc.; timber, ironmongery, paints, oils and colours; cement, lime, and chalk; tar-paving and tar-macadam; iron castings, road materials, pitch and creosote oil, etc., for the Corporation. Forms of tender of Mr. Ernest J. Elford, M.Inst.C.E., Borough Surveyor, Southend-on-Sea.

FEBRUARY 27.—**Otley.**—MATERIALS.—Supply for one year of granite macadam, furnace slag dust, kerbs and flags, limestone macadam, tar macadam, pitch, and carting road metal for the Otley U.D.C. Specifications from Mr. C. F. Hodgson, Surveyor, Council Offices, Otley.

FEBRUARY 28.—**Featherstone.**—IRONMONGERY.—Ironmongery, etc. in connection with 149 working-class dwellings shortly to be erected near Station-lane, Featherstone, by the U.D.C., as follows, namely:—(2) Grates, ranges, etc.; (3) baths; (4) water-closet pans, seats, etc.; (5) locks, window fasteners, etc. Schedules, etc., of Mr. Samuel Chesney, A.R.I.B.A., the Architect, Council Offices, Featherstone. Deposit, £2.

MARCH 5.—**Poplar.**—SUPPLIES.—Twelve months' supplies to the Poplar and Stepney Sick Asylum, including oils, colours, timber, builder's materials, etc. Mr S. G. Wright, Clerk, Board Offices, Devons-road, Bow, E.

ROAD, SANITARY, AND WATER WORKS.

FEBRUARY 9.—**Gleneagles.**—WATERWORKS.—Construction of reservoir intakes, fireclay-pipe conduits, cast-iron main and branch water supply pipes, and other relative works at Gleneagles, Perthshire. Quantities of the Engineers, Messrs. Formans & M'Call, 160, Hope-street, Glasgow. Deposit, £1 1s.

FEBRUARY 9.—**Linthwaite.**—STREET WORKS.—Construction of three streets and sewers therein at Storth, Cowlersley, Linthwaite, for the U.D.C. Quantities of Mr. David J. Bailey, Clerk to the Council, Yorkshire Bank-chambers, Huddersfield.

FEBRUARY 10.—**Barnard Castle.**—STREET WORKS.—Making-up of a portion of the road in Wilson-street, Barnard Castle, about 80 yds. in length, for the Barnard Castle U.D.C. Specification of Mr. H. E. Raine, Surveyor, Barnard Castle.

FEBRUARY 10.—**Birmingham.**—SEWERS.—For construction of sewage and surface-water sewers, Hay Mills, for the Corporation. Quantities, etc., of Mr. Henry E. Stilgoe, City Engineer and Surveyor, The Council House, Birmingham. Deposit, £2.

FEBRUARY 10.—**Blaydon.**—SANITARY.—Removal and disposal of contents of ashpits, etc., at Rowlands Gill, Smailes Estate, and Lintsford, for the Blaydon U.D.C. Particulars from Mr. Robert Biggins, at the offices of the Council, Blaydon-on-Tyne.

FEBRUARY 10.—**Malden.**—STREET WORKS.—(1) For making-up and maintaining Hoppingwood-avenue, measuring in all 646 ft., or thereabouts; (2) for paving with artificial stone slabs the footways in Hoppingwood-avenue, for the Maldens and Coombe U.D.C. Specifications, etc., of the Engineer and Surveyor, Mr. Reginald H. Jaffes, A.M.Inst.C.E., at the Municipal Offices, New Malden. Deposit, £2 2s. in each case.

FEBRUARY 10.—**Southampton.**—STREET WORKS.—Kerbing and making-up footpath in Oakley-road, for the Corporation. Specification at the Borough Engineer's Office, Southampton.

FEBRUARY 10.—**Torpoint.**—STREET WORKS.—Paving, kerbing, and making good the footpaths in Antony-road, Torpoint, for the U.D.C. Quantities from the Surveyor, Torpoint. Deposit, £1 1s.

FEBRUARY 11.—**Stoke-on-Trent.**—STREET WORKS.—Making-up various streets for the Corporation. Quantities of the Borough Engineer, Town Hall. Deposit, £1 1s.

FEBRUARY 13.—**Lancaster.**—STREET WORKS.—Making-up of three streets on Fairfield Estate. Specification of Borough Surveyor, Town Hall, Lancaster.

FEBRUARY 13.—**Llandilofawr.**—WATERWORKS.—Water main extensions in the roads leading from Waterloo to Morpha and from Morpha to Lotwen via Thornhill, in the parish of Llandebie, for the Llandilofawr R.D.C. Specifications of the Council's Engineer, Mr. H. Herbert, Brynmerlais, Ammanford.

FEBRUARY 13.—**Preston.**—STREET WORKS.—Levelling, paving, sewering, channelling, etc., the Back-road between Brixton-road and Frenchwood Mill, for the Corporation. Quantities of the Borough Surveyor, Town Hall, Preston.

FEBRUARY 14.—**Hale.**—SEWERS.—Sewering of Hermitage-road, Hale, for the U.D.C. Quantities, etc., of the Council's Surveyor, Mr. T. Blagburn, Council Offices, Ashley-road, Hale. Deposit, £1 1s.

FEBRUARY 14.—**Tyldesley.**—SEWERS.—For materials required in the construction of the main outfall sewer and sewage works extensions for the Tyldesley-with-Shakerley U.D.C. Specifications, etc., from Mr. E. E. Jones, Engineer and Surveyor to the Council, Council Offices, Tyldesley.

FEBRUARY 16.—**Burnham-on-Crouch.**—WATERWORKS.—For laying 726 yds. of 4-in. and 1,750 yds. of 3-in. iron service and pumping mains, etc., for the U.D.C. Quantities, etc., of Mr. J. Cook, Surveyor, Burnham-on-Crouch.

FEBRUARY 16.—**Hambledon.**—SEWERS.—About 500 yds of stoneware and iron pipe sewer, and constructing seven manholes or chambers in the Eastwood-road, Shalford, for the Hambledon R.D.C. Quantities, etc., of Mr. Edward L. Lunn, the Council's Surveyor, at 36, High-street, Guildford. Deposit, £2 2s.

FEBRUARY 16.—**Margate.**—STREET WORKS.—Making-up three passages for the Corporation. Particulars of the Borough Surveyor, 13, Grosvenor-place, Margate.

FEBRUARY 16.—**Merthyr Tydfil.**—WATER MAIN.—Laying a 10-in. water main (cast-iron and steel) of about 8,700 yds. length, from Pontsticill village to the the borough boundary on the road leading to Swansea for the Corporation. Quantities from the Waterworks Engineer, 101, High-street, Merthyr Tydfil. Deposit, £2 2s.

FEBRUARY 17.—**Ipswich.**—STEAM ROLLING.—For steam rolling during the year ending March 31, 1915, for the East Suffolk C.C. Specification from Mr. W. Jervis, County Road Surveyor, County Hall, Ipswich.

FEBRUARY 17.—**Lewisham.**—ROADS.—Kerbing, channelling, and metalling the roadway, and paving the footpaths with artificial stone (in two contracts) of part of Bellingham-road, Catford, for the B.C. Specification, etc., at the Town Hall, Catford (Surveyor's Department).

FEBRUARY 17.—**Watford.**—STREET WORKS.—Making-up the following roads:—Oxhey-avenue (400 yds), Ashby-road (225 yds), Field-road (120 yds), Willow-lane (120 yds) (part 1), for the Watford U.D.C. Quantities from Mr. D. Waterhouse, Engineer and Surveyor to the Council, Council Offices, High-street, Watford. Deposit, £1.

FEBRUARY 20.—**Rickmansworth.**—ROADS.—Diversion of main road, Batchworth-hill, Rickmansworth, for the Hertfordshire C.C. Specifications at the County Surveyor's Office, Hatfield. Deposit, £2 2s.

FEBRUARY 21.—**Ashby-de-la-Zouch.**—SEWERS.—For Ravenstone main drainage, for the Ashby-de-la-Zouch R.D.C. Total length of sewer, 2 miles 3 furlongs 104 yds. Also concrete tanks, carriers, filters, sludge pits, effluent drains, etc., to outfall site, the connection of private drains, and other works connected therewith. Quantities, etc., of the Engineer, Mr. Thomas I. McCarthy, Council-chambers, Coalville, near Leicester. Deposit, £5 5s.

FEBRUARY 23.—**Epsom.**—STREET WORKS.—Making-up of Rosebery-road, Cheam, for the Epsom U.D.C. Specification of the Surveyor of Highways, Mr. T. E. Ware, Waterloo-road, Epsom.

FEBRUARY 28.—**Reading.**—DRAINAGE.—Execution of works of sewerage and surface-water drainage in and in the neighbourhood of the Tilehurst area of the borough for the Corporation. Specification, etc., of the Engineer, Mr. G. Midgley Taylor, of the firm of Messrs. John Taylor & Sons, Caxton House, Westminster. Deposit, £2.

MARCH 2.—**Coalville.**—SEWERS.—Laying of a mile of 9-in. sewers, and 490 yds. of 18-in. sewer, and 300 yds. of 4-in. cast-iron and steel main, for the Coalville U.D.C. Quantities from Mr. L. L. Baldwin, A.M.Inst.C.E., Town Surveyor, Coalville. Deposit, £2 2s.

Public Appointment.

* FEBRUARY 23.—ARCHITECT.—The Exeter City Council and Local Education Authority invite application for the above post. Salary, £220 per annum.

Auction Sales.

* FEBRUARY 10.—**Stratford.**—Messrs. J. Hibbard & Son will sell by auction, on the premises, a stock of iron buildings.

* FEBRUARY 11.—Messrs. Churchill & Sim will sell by auction, at the Great Hall, Winchester House, Old Broad-street, E.C., an assortment of deals, battens, boards, timbers, etc.

* FEBRUARY 11.—**Middlesex.**—Messrs. S. Walker & Son will sell by auction, at the Mart, freehold factory property.

* FEBRUARY 12.—**London.**—Messrs. Fryett, White, & Co. will sell by auction, at 23, Moorfields, E.C., the stock of a general ironmonger.

* FEBRUARY 12.—**Tulse Hill.**—Messrs. Brodie, Timbs, & Co. will sell by auction, at the Mart, freehold corner premises.

* FEBRUARY 16.—**East Ham.**—Messrs. Robins & Hine will sell by auction, on the premises, a quantity of timber.

* FEBRUARY 17.—BUILDER AND CONTRACTOR'S STOCK, PLANT, AND MACHINERY.—Mr. H. W. Smith will sell by auction, on the premises, the stock, plant, and machinery of a builder and contractor.

* FEBRUARY 25.—**Hatton-garden.**—Messrs. E. Fox & Bousfield will let by auction a freehold building site.

[Those with an asterisk (*) are advertised in this issue.]

QUANTITY SURVEYORS' ASSOCIATION—
continued from page 174.

all concerned. The surveyor could be of real assistance when endeavouring with the architect to foresee and steer clear of these difficulties and overcome them when they arose.

Mr. G. Hubbard, Vice-President of the Royal Institute of British Architects, in reply, referred at some length to the question of registration, and outlined what had been done during the last ten years in the endeavour to bring about the registration of architects, mentioning the latest proposals of the R.I.B.A. as to the new charter under which it is hoped to get powers to protect the public and the qualified architect against the unqualified. He referred to the difficulties of title, and said that "chartered architects" did not satisfy many of them, nor "registered architects," for they could not forget that there were registered nurses and registered plumbers. The President had suggested, he (the speaker) understood, that quantity surveyors should try and obtain registration, but if they got it they would be hampering themselves with fetters of iron, which could not be taken off when once an Act had been passed. He suggested that they might do as the Institute were intending to do—*i.e.*, go to the Privy Council and ask for a charter.

Mr. S. Chatfeild Clarke, F.S.I., proposed the toast of "The Contractors," and said that in every town and village, almost, in the whole country contractors were amongst the most honoured and respected of citizens. But the lot of the contractor was not a happy one, what with subcontractors and labour troubles. Thanks to the subcontractor, the general contractor was often left with little more than the shell of a building to do, and he was a sort of paymaster-general, though he had all the responsibility. He understood that negotiations were going on between the R.I.B.A. and the Institute of Builders on the subject, and it was to be hoped that contractors would soon get fairer treatment. As to labour troubles, contractors were quite right in trying to enforce on the unions and the men the necessity of abiding by a contract once it was made, but he was not so sure about the agreement the men were asked to sign, and he thought it better to force the unions to abide by their contracts. If there were two powerful combinations, one for the masters and one for the men, who feared and respected each other, he thought there would be more chance of industrial peace, and he hoped that result would be arrived at.

Mr. Walter Lawrence, jun., President of the London Master Builders' Association, in reply, said it was true that the building contractor was largely a paymaster-general on the works, but he hoped that something would be done to put him in a better position as a result of the negotiations between the R.I.B.A. and the Institute of Builders. Mr. Lawrence then referred at some length to the labour dispute in the trade, and mentioned the facts which had led up to the dispute, and stated the present position. The trouble, he said, was of vital importance to the building trade of London and to the professions represented there that evening. The spirit of Larkinism had invaded London. There was no objection to trade unions conducted on proper lines, but there was a rebel section springing up in the unions following the steps of Larkin, which they objected to, and it was attempting to carry the responsible leaders off their legs and run the unions on the lines of Syndicalism and Socialism. Business could not be carried on if men were liable at any time to lay down their tools, and before the masters took action twenty recent strikes had taken place. As to the much-criticised agreement which the men were asked to sign, when collective bargaining failed, another step was necessary, and the masters thought it would be as well to bring home to the men individually that they were expected to respect their obligations just as the masters did. A number of the men had signed, and undoubtedly the agreement was a step in the right direction. The masters had no objection to collective bargaining providing the necessary guarantees were forthcoming, but they expected the men to meet them and say what form the guarantee should take. The masters would be willing to meet the men at any time they liked, but only those unions with whom they had agreements with, and he hoped they would be able to meet them soon and so bring about a solution of a very difficult problem. He hoped the architects, surveyors, and quantity surveyors would help them and thus help the trade. It was a fight to a finish so far as the masters were concerned.

The last toast, "The Visitors," was ably proposed by Mr. H. J. A. Chidgey, the Mayor of Stepney and Past-President of the Association.

In acknowledging the toast Alderman William Thompson, of Richmond, Surrey, offered Mr. Carless his hearty congratulations on becoming President of the Association. He had known their President some twenty years, first as an opponent in municipal life and latterly as a friend and colleague whom he had learned to respect and esteem for his energy and hard work for the general welfare. He claimed some knowledge of the profession, for he himself was set by his father, a master builder, to get out quantities for jobs when only fourteen years of age. The housing and town-planning question, in which for years he had been deeply interested, was, he claimed, pre-eminently one of facts and figures, and this should commend it to the careful consideration of all members of the Quantity Surveyors' Association.

Sir Herbert H. Bartlett, Bart., also replied to the toast. He heartily congratulated the Association on the fact that every year its annual dinner was more largely attended, a proof if need be of its growing usefulness and prosperity. He had never, he believed, listened to a more interesting address nor one showing greater grasp of the subject than the one given by their President that evening.

THE LONDON COUNTY COUNCIL.

THE usual weekly meeting of the London County Council was held on Tuesday in the County Hall, Spring-gardens, S.W., Mr. Cyril Cobb, Chairman, presiding.

Tenders.—Tenders were received for re-drainage, etc., works at the Plassy-road School, Lewisham.

Loans.—The Finance Committee recommended that a loan of £6,800 be made to the Kensington Borough Council for depôt buildings.

Theatres, etc.—The following drawings have been approved by the Theatres and Music Halls Committee:—Balham Assembly Rooms—electrical arrangements; Britannia Theatre, Hoxton—provision of cinematograph enclosure; 138, Copenhagen-street—electrical and gas installations; 73, East India Dock-road—electrical installation; Florence Restaurant—alteration of entrance doors from Rupert-street; Grand Theatre, Fulham—provision of cinematograph enclosure; 184-186, Grove-road, Poplar—alterations to electrical arrangements; 7, High-street, Islington—provision of draught doors; 120, Jamaica-road, Bermondsey—rearrangement of seating, electrical and gas installations; 121, Lordship-lane—electrical and gas installations; Lower Sydenham Social Hall—installation of electric fan; Oxford Music Hall—installation of electric fan; 291A, Oxford-street—installation of life targets; 191, Portobello-road—provision of draught doors; 116, Rye-lane and 15-27, Choumert-grove—proposals for complying with the conditions attached to the Council's approval of the drawings of the cinematograph hall; 30, Tottenham Court-road—seating arrangements; 92, Wandsworth-road—proposed gas radiators and gas points and picture screen.

LAW REPORT.

COURT OF APPEAL.

(Before the MASTER OF THE ROLLS, the PRESIDENT OF THE PROBATE, DIVORCE, AND ADMIRALTY DIVISION, and Mr. Justice EVE.)

Contractors' Successful Appeal in Workman's Compensation Claim.

THIS case was heard on the 29th ult. upon the appeal of the respondents (the employers) from the award of the Judge sitting at the Portsmouth County Court, in favour of the applicant, under the provisions of the Workmen's Compensation Act.

Mr. Frampton, in support of the appeal, said the applicant did not appear, nor was he represented on the appeal. The applicant was a labourer employed by the respondents, who were engaged in December, 1911, in excavating and building a new dock in Portsmouth Dockyard. The applicant's case was that on December 28, 1911, he, while taking tools to the grinding shop for regrinding, stumbled over a sleeper and hurt his left knee. He was picked up by two timekeepers, and Coltman stated he was not hurt. He continued to work until January 22, 1912, and he then reported the accident, not to the employers, but to an ambulance man. Coltman said he was suffering in both of his knees. The ambulance man gave him a ticket for the doctor, and afterwards Coltman went to the infirmary. The employers had never received any written notice of the accident at all, and they only received verbal notice of it on February 5, 1912. The County Court Judge found that Coltman was suffering incapacity as a result of the accident on January 22, 1912, and that he had reported the accident to the ambulance man on that day, and, further, that notice of the accident, which was given to a man named Bird, the respondents' cashier, was a good notice within the meaning of the Act, and that the respondents were not prejudiced by the delay which had occurred in the giving of the notice. The applicant did not start the present arbitration proceedings until January, 1913. Mr. Frampton contended that, in the circumstances, there was clear evidence that the employers were prejudiced by the notice not having been given within a reasonable time after the accident.

Their Lordships took this view, holding that the County Court Judge had misdirected himself, and that his award in favour of the applicant could not be maintained. The appeal was accordingly allowed.

Mr. Frampton stated that the respondents did not ask for costs.

PRICES CURRENT OF MATERIALS.

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

Per 1000 Alongside, in River.	£ s. d.
Best Stocks	1 16 6
Picked Stocks for Facings	2 10 0

Per 1000, Delivered at Railway Depôt.	£ s. d.		£ s. d.
Flettons	1 14 0	Best Blue Pressed Staffordshire	3 15 0
Best Fareham Red	3 12 0	Do. Bullnose	4 0 0
Best Red Pressed Ruabon Facing	5 0 0	Best Stourbridge Fire Bricks	4 0 0

Glazed Bricks—			
Best White, Ivory, and Salt Glazed Stretchers	12 7 6	Double Headers	14 17 6
Headers	11 17 6	One Side and two Ends	18 17 6
Quoins, Bullnose and 4½ in.		Two Sides and one End	19 17 6
Flats	15 17 6	Splays and Squints	17 7 6
D'ble Str'tch'rs	17 17 6		

Second Quality £1 10s. per 1000 less than best.

	s. d.	
Thames and Pit Sand	7 0	per yard, delivered.
Thames Ballast	5 9	„
Best Portland Cement	37 0	per ton, „
Best Ground Blue Lias Lime	20 0	„ „

NOTE—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime ..... 14s. 0d. per yard delivered.
Stourbridge Fireclay in sacks 27s. 0d. per ton at rly. dpt.

STONE.

Per Ft. Cube.	s. d.
Bath Stone—delivered on road waggons, Paddington Depôt	1 7½
Do. do. delivered on road waggons, Nine Elms Depôt	1 9½
Portland Stone (20 ft. average)—	
Brown Whitbed, delivered on road waggons, Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2 4½
White Basebed, delivered on road waggons Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2 6½

Per Ft. Cube, delivered at Railway Depôt.	s. d.		s. d.
Ancaster in blocks	1 10	Closeburn Red Freestone	2 0
Beer in blocks	1 6	Red Mansfield Freestone	2 4
Greenshill in blocks	1 10	Talacre & Gwespyr Stone	2 4
Darley Dale in blocks	2 4		
Red Corsehill in blocks	2 3		

York Stone—*Robin Hood Quality.*	s. d.
Per Ft. Cube, Delivered at Railway Depôt.	
Scappled random blocks	2 10
Per Ft. Super., Delivered at Railway Depôt.	
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2 8
6 in. rubbed two sides ditto, ditto	2 6
3 in. sawn two sides slabs (random sizes)	0 11½
2 in. to 2½ in. sawn one side slabs (random sizes)	0 7
1½ in. to 2 in. ditto, ditto	0 6
Hard York—	
Per Ft. Cube, Delivered at Railway Depôt.	
Scappled random blocks	3 0
Per Ft. Super., Delivered at Railway Depôt.	
6 in. sawn two sides landing to sizes (under 40 ft. super.)	2 8
6 in. rubbed two sides ditto	3 0
3 in. sawn two sides slabs (random sizes)	1 2
2 in. self-faced random flags	0 5

SLATES.

Per 1000 of 1200 at Railway Depôt.

	£	s.	d.
In. In.			
20 × 10 best blue Bangor	13	2	6
20 × 12 ditto ..	13	17	6
20 × 10 1st q'lity ditto	13	0	0
20 × 12 ditto ..	13	15	0
16 × 8 ditto ..	7	5	0
22 × 10 best blue Portmadoc ..	12	12	6
16 × 8 ditto ..	6	12	6

In. In.	£	s.	d.
20 × 10 best Eureka untading green..	15	17	6
20 × 12 ditto ..	18	7	6
18 × 10 ditto ..	13	5	0
16 × 8 ditto ..	10	5	0
20 × 10 permanent green	11	12	6
18 × 10 ditto ..	9	12	6
16 × 8 ditto ..	6	12	6

TILES.

At Railway Depôt.

	s.	d.
Best plain red roofing (per 1000) ..	42	0
Hip and Valley (per doz.) ..	3	7
Best Broseley (per 1000)	50	0
Do. Ornamental (per 1000)	52	6
Hip and Valley (per doz.) ..	4	0
Best Ruabon red, brown, or brindle (Edw'ds)(per1000)	57	6
Do. Ornamental(per 1000)	60	0
Hip (per doz.) .	4	0
Valley(perdoz.)	3	0

	s.	d.
Best "Hartshill" brand, plain sand-faced (per 1000) .	45	0
Do. pressed (per 1000)	42	6
Do. Ornamental(per 1000)	47	6
Hip (per doz.) .	4	0
Valley(per doz)	3	6
Staffords. (Hanley) Reds or Brindled (per 1000)	42	6
Hand-made sand-faced (per1000)	45	0
Hip (per doz.) .	4	0
Valley(per doz)	3	6

WOOD.

Building Wood.	At per standard. £	s.	d.	£	s.	d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in...	15	0	0 ..	16	10	0
Deals: best 3 in. by 9 in.....	15	0	0 ..	16	0	0
Battens: best 2½ in. by 7 in. and 3 in., and 3 in. by 7 in. and 8 in.	12	10	0 ..	13	10	0
Battens: best 2½ by 6 and 3 by 6	0	10	0	less than 7 in. and 8 in. less than best		
Deals: seconds	1	0	0			
Battens: seconds	0	10	0	"		
2 in. by 4 in. and 2 in. by 6 in.	11	10	0 ..	12	10	0
2 in. by 4½ in. and 2 in. by 5 in.	10	10	0 ..	11	10	0
Foreign Sawn Boards— 1 in. and 1¼ in. by 7 in.....	0	10	0	more than battens.		
¼ in.	1	0	0	"		
Fir timber: best middling Danzig or Memel (average specification)	At per load of 50 ft. 5	0	0 ..	6	5	0
Seconds	4	10	0 ..	5	0	0
Small timber (8 in. to 10 in.)	3	17	6 ..	4	0	0
Small timber (6 in. to 8 in.)	3	5	0 ..	3	10	0
Swedish balks	2	12	6 ..	3	0	0
Pitch-pine timber (90 ft. average)	6	0	0 ..	7	0	0

Joiners' Wood.	At per standard. £	s.	d.	£	s.	d.
White Sea: first yellow deals, 3 in. by 11 in.....	26	0	0 ..	27	0	0
3 in. by 9 in.	24	0	0 ..	25	0	0
Battens, 2½ in. and 3 in. by 7 in.	18	10	0 ..	19	10	0
Second yellow deals, 3 in. by 11 in.	21	10	0 ..	22	10	0
Do. 3 in. by 9 in.	20	0	0 ..	21	0	0
Battens, 2½ in. and 3 in. by 7 in.....	15	0	0 ..	16	0	0
Third yellow deals, 3 in. by 11 in. and 9 in.	16	0	0 ..	17	0	0
Battens, 2½ in. and 3 in. by 7 in.....	14	0	0 ..	15	0	0
Petersburg: first yellow deals, 3 in. by 11 in.....	23	0	0 ..	24	0	0
Do. 3 in. by 9 in.	20	0	0 ..	21	0	0
Battens	15	0	0 ..	16	0	0
Second yellow deals, 3 in. by 11 in.	17	10	0 ..	18	10	0
Do. 3 in. by 9 in.....	16	0	0 ..	17	0	0
Battens	12	10	0 ..	13	10	0
Third yellow deals, 3 in. by 11 in.	14	0	0 ..	15	0	0
Do. 3 in. by 9 in.....	13	10	0 ..	14	10	0
Battens	11	10	0 ..	12	10	0
White Sea and Petersburg— First white deals, 3 in. by 11 in.	16	10	0 ..	17	10	0
First white deals, 3 in. by 9 in.	14	10	0 ..	15	10	0
Battens	13	0	0 ..	13	10	0
Second white deals, 3 in. by 11 in.	14	10	0 ..	15	10	0
Second white deals, 3 in. by 9 in.	13	0	0 ..	14	0	0
Battens	12	0	0 ..	12	10	0
Pitch-pine deals	25	0	0 ..	26	10	0
Under 2 in. thick extra..	0	10	0 ..	1	0	0
Columbian or Oregon Pine, best quality.....	23	10	0 ..	26	0	0
Yellow Pine — First, regular sizes	50	0	0	upwards.		
Oddments	35	0	0	"		
Seconds, regular sizes.....	36	0	0	"		
Oddments	31	0	0	"		
Kauri Pine—Planks per ft. cube	0	5	6 ..	0	6	6
Danzig and Stettin Oak Logs— Large, per ft. cube.....	0	3	0 ..	0	3	9
Small	0	2	6 ..	0	3	0
Wainscot Oak Logs, per ft. cube	0	7	6 ..	0	9	0
Dry Wainscot Oak, per ft. super. as inch	0	0	10 ..	0	1	2
¼ in. do.	0	0	9 ..	0	1	0
Dry Mahogany — Honduras, Tabasco, per ft. super, as inch	0	0	10 ..	0	1	3
Selected, Figury, per ft. super. as inch	0	1	6 ..	0	2	6
Cuba Mahogany	0	1	4 ..	0	2	6
				upwards.		

WOOD (*Continued*).

Joiners' Wood (*Continued*)—	£	s.	d.	£	s.	d.
Dry Walnut, American, per ft. super, as inch	0	0	10 ..	0	1	2
French "Italian." Walnut ..	0	0	10 ..	0	1	4
Teak, per load (Rangoon or Moulmein)	20	10	0 ..	26	0	0
Do., do. (Java)	19	0	0 ..	22	10	0
American Whitewood planks, per ft. cube	0	5	6 ..	0	6	6
Prepared Flooring, etc.—	Per square.					
1 in. by 7 in. yellow, planed and shot	0	14	6 ..	0	18	0
1 in. by 7 in. yellow, planed and matched	0	14	9 ..	0	19	0
1¼ in. by 7 in. yellow, planed and matched	0	17	6 ..	1	3	0
1 in. by 7 in. white, planed and shot	0	14	0 ..	0	16	0
1 in. by 7 in. white, planed and matched	0	14	3 ..	0	16	6
1¼ in. by 7 in. white, planed and matched	0	16	6 ..	0	8	6
¾ in. by 7 in. yellow, matched and beaded or V-jointed boards.....	0	12	6 ..	0	15	0
1 in. by 7 in. " "	0	15	0 ..	0	18	6
¾ in. by 7 in. white " "	0	12	0 ..	0	14	0
1 in. by 7 in. " "	0	14	6 ..	0	16	6

6 in. at 6d. to 9d. per square less than 7 in.

JOISTS, GIRDERS, &c.

	In London or delivered Railway Vans, per ton. £	s.	d.	£	s.	d.
Rolled Steel Joists, ordinary sections	9	0	0 ..	10	0	0
Compound Girders, ordinary sections	11	0	0 ..	12	0	0
Steel Compound Stanchions..	12	0	0 ..	13	0	0
Angles, Tees, and Channels, ordinary sections.....	11	0	0 ..	12	0	0
Flitch Plates	11	0	0 ..	12	0	0
Cast Iron Columns & Stanchions, including ordinary patterns	8	10	0 ..	9	0	0

METALS.

	Per ton, in London. £	s.	d.	£	s.	d.
Iron—						
Common Bars	9	0	0 ..	9	10	0
Staffordshire Crown Bars, good merchant quality ..	9	5	0 ..	9	15	0
Staffordshire "Marked Bars"	11	0	0 ..	—		
Mild Steel Bars	9	5	0 ..	9	15	0
Hoop Iron, basis price	10	0	0 ..	—		
" Galvanised....	17	10	0 ..	—		

(* And upwards, according to size and gauge.)

Sheet Iron Black— Ordinary sizes to 20 g.	10	5	0 ..	—
" " 24 g.	11	5	0 ..	—
" " 26 g.	12	15	0 ..	—
Sheet Iron, Galvanised, flat, ordinary quality— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15	10	0 ..	—
Ordinary sizes to 22 g. and 24 g.	16	0	0 ..	—
Ordinary sizes to 26 g.	17	0	0 ..	—
Sheet Iron, Galvanised, flat, best quality— Ordinary sizes to 20 g.	18	10	0 ..	—
" " 22 g. and 24 g.	19	0	0 ..	—
Ordinary sizes to 26 g.	20	10	0 ..	—
Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 8 ft. 20 g.	15	0	0 ..	—
Ordinary sizes, 22 g. and 24 g.	15	5	0 ..	—
Ordinary sizes, 26 g.	16	15	0 ..	—
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	12	10	0 ..	—
Best Soft Steel Sheets, 22 g. & 24 g.	13	10	0 ..	—
Best Soft Steel Sheets, 26 g..	15	10	0 ..	—
Cut Nails, 3 in. to 6 in.....	11	0	0 ..	11 10 0

(Under 3 in., usual trade extras.)

LEAD, &c.

	Delivered in London. £	s.	d.			
Lead—Sheet, English, 4 lb. and up	23	5	0 ..	—		
Pipe in coils.....	23	0	0 ..	—		
Soil pipe	26	0	0 ..	—		
Compo pipe	26	0	0 ..	—		
Zinc—Sheet—	In casks of 10 cwt.					
Vielle Montagne	28	5	0 ..	—		
Silesian	28	10	0 ..	—		

Zinc, in bundles, 1s. per cwt. extra.

Copper— Strong Sheet ..... per lb.	0	1	1 ..	—		
Thin " ..... "	0	1	2 ..	—		
Copper nails..... "	0	1	0 ..	—		
Copper wire..... "	0	1	0 ..	—		
Brass— Strong Sheet ..... "	0	1	0 ..	—		
Thin ..... "	0	1	1 ..	—		
Tin—English Ingots .. "	0	1	9 ..	—		
Solder—Plumbers' "	0	0	10 ..	—		
Tinmen's ..... "	0	1	1 ..	—		
Blowpipe ... . "	0	1	3 ..	—		

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.*

Per Ft. Delivered.

15 oz. thirds	2¼d.	26 oz. fourths	3¾d.
" fourths	2d.	22 oz. thirds	5½d.
21 oz. thirds	3½d.	" fourths	4½d.
" fourths	3d.	Fluted Sheet, 15 oz.	3d.
26 oz. thirds	4½d.	" 21 oz.	4d.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.*

Per Ft. Delivered.

⅛ Rolled plate	2½d.
¼ Rough rolled and rough cast plate	2¾d.
⅜ Rough rolled and rough cast plate	3d.
Figured Rolled, Oxford Rolled, Oceanic, Arctic, Muffled, and Rolled Cathedral, white	3½d.
Ditto, tinted	5d.

* Not less than two crates.

OILS, &c.

		£	s.	d.
Raw Linseed Oil in pipes	per gallon	0	2	2
" " " in barrels	"	0	2	3
" " " in drums	"	0	2	5
Boiled " " in barrels	"	0	2	5
" " " in drums	"	0	2	8
Turpentine in barrels	"	0	2	9
" in drums.....	"	0	2	11
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)		29	15	0
Red Lead, Dry	per ton	28	0	0
Best Linseed Oil Putty	per cwt.	0	9	0
Stockholm Tar	per barrel	1	12	0

VARNISHES, &c.

	Per gallon. £	s.	d.
Fine Pale Oak Varnish.....	0	5	0
Pale Copal Oak	0	10	6
Superfine Pale Elastic Oak.....	0	12	6
Fine Extra Hard Church Oak	0	10	0
Superfine Hard-drying Oak, for seats of Churches	0	14	6
Fine Elastic Carriage	0	12	9
Superfine Pale Elastic Carriage	0	16	0
Fine Pale Maple	0	10	0
Finest Pale Durable Copal	0	18	6
Extra Pale French Oil.....	1	1	0
Eggshell Flating Varnish.....	0	18	0
White Pale Enamel	1	4	0
Extra Pale Paper.....	0	12	0
Best Japan Gold Size	0	10	0
Best Black Japan.....	0	16	0
Oak and Mahogany Stain	0	9	0
Brunswick Black	0	8	0
Berlin Black	0	18	0
Knotting	0	10	6
French and Brush Polish.....	0	10	0

TO CORRESPONDENTS.

NOTE.—All communications with respect to literary and artistic matters should be addressed to "THE EDITOR" (and not to any person by name); those relating to advertisements and other exclusively business matters should be addressed to THE BUILDER LTD., and *not* to the Editor.

All communications must be authenticated by the name and address of the sender, whether for publication or not. No notice can be taken of anonymous communications.

The responsibility of signed articles, letters, and papers read at meetings rests, of course, with the authors.

We cannot undertake to return rejected communications; and the Editor cannot be responsible for drawings, photographs, manuscripts, or other documents, or for models or samples sent to or left at this office, unless he has specially asked for them.

All drawings sent to or left at this office for consideration should bear the owner's name and address on either the face or back of the drawing. Delay and inconvenience may result from inattention to this.

Any commission to a contributor to write an article, or to execute or lend a drawing for publication, is given subject to the approval of the article or drawing, when received, by the Editor, who retains the right to reject it if unsatisfactory. The receipt by the author of a proof of an article in type does not necessarily imply its acceptance.

N.B.—Illustrations of the First Premiated Design in any important architectural competition will always be accepted for publication by the Editor, whether they have been formally asked for or not.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than* 6 p.m. on *Wednesday*. [N.B.—We cannot publish Tenders unless authenticated either by the architect or the building owner; and we cannot publish announcements of Tenders accepted unless the amount of the Tender is stated, nor any list in which the lowest Tender is under 100*l.* unless in some exceptional cases and for special reasons.]

* Denotes *accepted*. † Denotes *provisionally accepted*.

BARKING.—For thirty-eight houses, for the Urban District Council. Mr. C. F. Dawson, Surveyor, Urban District Council Offices, Barking :—

S. E. Moss	£9,300 0	E. E. Cross	£6,475 10
Clemens	8,474 10	Clement & Son ..	6,300 0
F. Wilmot	6,947 0	E. H. Glenny* ...	6,206 3
A. Newman, Ltd.	6,845 0		

BECCLES (Norfolk).—For new theatre, for the Eastern Counties Cinematograph Company. Messrs. Morgan & Buckingham, F.S.I., A.R.I.B.A., architects and surveyors, Norwich. Quantities by the architects :—

R. Todd & Son	£1,450	Hindes & Co.....	£1,174
W. J. Hannant	1,249	T. H. Yelf, Norwich*	1,160
H. Hindes	1,178		

BRIERLEY HILL.—For erection of drill hall, for the Staffordshire Territorial Force Association :—

C. H. Horton* £1,938

DARTFORD.—For erection of workshop at Technical Institute, for the Kent Educational Committee :—

Friday & Ling* £582 14 4

DURHAM.—Widening of Browney Burn Bridge, for Durham County Council :—

J. W. Pearce & Co., Barrow* £417 5 6

FERRYHILL.—Construction of new road, etc., at Ferryhill, for the Durham County Council :—

T. Telford Gibb, Westminster* £8,570

HANDSWORTH.—For erection of drill hall, for the Staffordshire Territorial Force Association :—

G. Webb & Son* £2,586

HENDON.—For new bedroom wing at "Hendon Hall" Residential Hotel, Hendon, N.W., for Hendon Hall, Ltd., of 70, Mark-lane, E.C. Mr. Eugene C. Beaumont, architect, 78, Fleet-street, E.C.:—
Wagstaff ....£2,237 | W. Whiteley, Ltd..* £2,177
[* Accepted with additional works at £2,500.]

LEWISHAM.—For laying wood paving in Bromley-road, for the Borough Council:—
Improved Wood Pavement Co.* £9,455

LEWISHAM.—Construction of concrete water storage tank at Ladywell Baths, for the Borough Council:—
T. Rider & Son, Southwark* £488

LEYTON.—For emergency iron staircase at Cann Hall-road Boys' School. Mr. E. H. Essex, Surveyor, Urban District Council Offices, Leyton:—

J. Couper & Co.	£205 10 0
Hayward Bros. & Eckstein, Ltd. ...	197 0 0
F. A. Norris & Co.	169 10 0
General Iron Foundry Co., Ltd. ...	150 10 0
C. A. & A. W. Haward	144 13 0
F. J. Coxhead, 45, Bulwer-road, Leytonstone*	99 16 11

LICHFIELD.—For erection of drill hall, for the Staffordshire Territorial Force Association:—
A. E. Chatfield* £1,750

LONDON.—For adaptation of buildings at Wandsworth Common, for London County Council:—

J. & C. Bowyer, Ltd.	£1,549	F. W. Fletcher	£1,221
R. A. Jewell	1,549	E. Triggs & Co., Clapham*	1,220
J. Garrett & Son	1,450		
H. H. Hollingsworth	1,225		

LONDON.—For painting and repairs to conveniences, etc., Westminster. Mr. J. W. Bradley, City Engineer, City Hall, Westminster:—

—	Conveniences.	Urinals.	Open Spaces.
	£ s. d.	£ s. d.	£ s. d.
T. Coulthard	532 2 0	98 15 0	155 18 0
Burton Bros.	491 10 0	95 10 0	134 10 0
J. R. Sims	474 0 0	92 0 0	128 0 0
Love & Co.	424 10 0	99 15 0	119 15 0
A. H. Inns	395 0 0*	60 0 0*	142 0 0
W. Wright & Son	395 14 0	90 0 0	107 5 0*

LONDON.—For wood-paving in Bromley-road from Beckenham-lane to the Borough boundary, Lewisham. Mr. E. Van Putten, Surveyor, Town Hall, Catford:—

P. Smith	£15,170 10 0
Fry Bros.	11,216 13 4
H. Farrow	11,0 7 10 0
W. Griffiths & Co., Ltd.	10,164 19 2
J. Mowlem & Co., Ltd. ...	9,945 8 4
Acme Flooring and Paving Co. (1904), Ltd.	9,893 6 8
H. Woodham & Sons	9,606 7 6
Improved Wood Pavement Co., Ltd.*	9,455 9 2

MAIDSTONE.—For making-up Barton-road, for the Town Council:—

N. Smith	£379 0	W. T. Burrows* ...	£302 0
Clark & Epps	307 10		

MARGATE.—For the Strict Baptist Chapel. Messrs. G. Baines & Son, architects, 5, Clement's-inn, Strand, London, W.C.:—

C. E. Skinner ...	£2,028 0	Hayward & Paramour	1,878 0
Brightman & Son, Ltd.	1,987 0	Wallis & Sons, Ltd.	1,830 0
Dorey & Co.	1,950 0	E. W. Martin	1,800 0
Lewis & Sons	1,915 0	T. T. Denne	1,794 0
W. W. Martin ...	1,899 0	Archer & Son ...	1,791 0
West Bros.	1,697 0	Elliott & Co.* ...	1,755 10

MESSING.—For erection of school, for the Essex Education Committee:—
J. Smith & Son, Witham* £1,592

MIDDLESBROUGH.—For erection of laundry at Sanatorium, for the Corporation:—
Dean Bros.* £2,577

RUNCORN.—For sanitary improvements at Mersey View Cottages, for the Runcorn Rural District Council:—
W. H. Davey & Co.* £174 16 6

SEVENOAKS.—For works for the supply of water to Fordcombe, for the Sevenoaks Urban District Council:—
H. Bingham, Groombridge* £1,467 17

SILLOTH.—For erection of police station, for the Cumberland County Council:—

Builders' Work: J. & R. Bell, Carlisle	£1,166
Joiners' Work: J. Jamieson, Annan	478
Plasterers' Work: W. Thomson & Sons, Annan	260
Plumbers' Work: D. Thomson & Sons, Carlisle	192
Slaters' Work: J. Hewitson, Carlisle	116
Painters' and Glaziers' Work: W. M. Mark, Wigton	70

SITTINGBOURNE.—For extension of main sewer, for the Urban District Council:—
Millen & Chrisfield, Melton Regis* ... £775 10

SLEAFORD.—For the carrying out of the Hecking-ton water extension scheme, for the Rural District Council of Sleaford:—

W. Pattinson & Sons	£2,875 0 0
J. T. Barnes	2,850 0 0
E. Taylor	2,827 11 1
J. Banks & Son	2,780 0 0
J. Hudson, North Hykeham*	2,514 19 8

SOUTHALL (Middlesex).—For additions and alterations to the North-road Council School at Southall, for the County Council of Middlesex. Mr. H. G. Crothall, F.R.I.B.A., Architect to the Education Committee:—

Willmott & Sons, Ltd.	£10,050	W. Lawrence & Son	£9,392
H. Knight & Son ...	9,807	Mattock Bros.	9,356
W. J. Dickens	9,739	Passmidge & Son.....	9,349
G. Neal	9,472	W. Lacey	9,334
A. Porter	9,401	A. & B. Hanson.....	9,342
		A. Monk‡	9,215

‡ Recommended for acceptance.

STOKE-ON-TRENT.—For covering over the canal in connection with the London-road improvement near Campbell-place, for the Corporation:—
P. Barke & Son* £1,329

TWICKENHAM.—For private street improvement works in Hartington-road. Mr. P. W. Pearce, Surveyor, Urban District Council Offices, Twickenham:—

Fry Bros., Ltd.	£242 10 6
J. Mowlem & Co., Ltd.	223 18 8
G. Wimpey & Co.*	186 5 7

WARRINGTON.—For erection of boiler-house, chimney, and alterations at the baths in Bath-street:—
P. McLachlan, Fairfield Garage, Warrington £973

WEDNESFIELD.—For erection of drill hall, for the Staffordshire Territorial Force Association:—
Amies & Sharrott* £1,695

WICKFORD.—Erection of elementary school, for the Essex Education Committee:—
J. Rayner, East Hanningfield* £2,133

WILLESDEN.—For making-up Holland-road. Mr. O. Claude Robinson, Engineer, Urban District Council Offices, Willesden:—

W. Griffiths & Co., Ltd.	£2,700	T. Adams	£2,186
		F. G. Brummell*	2,091

[*.* With reference to a list of tenders which appeared in our last issue on page 150, for building works to be carried out in Portugal-street, W.C., for Messrs. W. H. Smith & Son, a printer's error was unfortunately made in giving Messrs. Fairhead & Son as the accepted tenderers. We understand that Messrs. Killby & Gayford, Ltd., of Worship-street, E.C., were accepted.]

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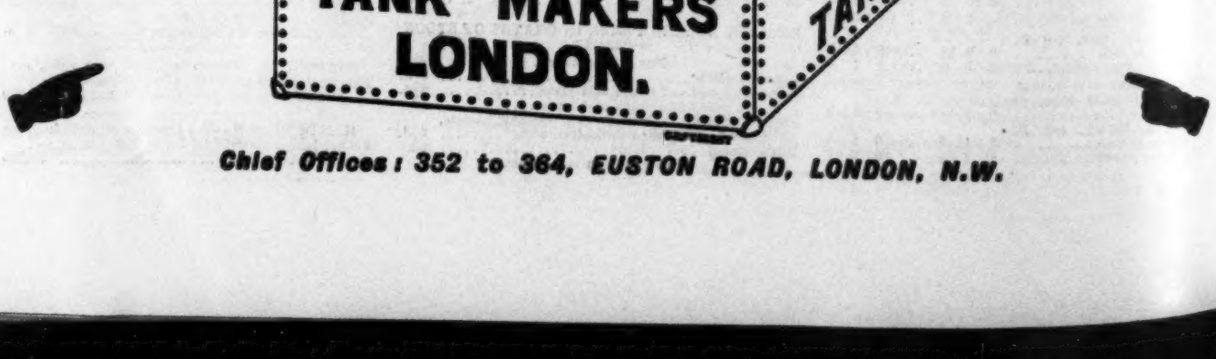

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